The impact of nurses’ values on the prevention of pressure ulcers: a Straussian grounded theory study.

Raymond. K. Samuriwo

A submission presented in partial fulfilment of the requirements of the University of Glamorgan/Prifysgol Morgannwg for the degree of Doctor of Philosophy

September 2011
Abstract

This is a Straussian grounded theory study about the impact of nurses’ values on pressure ulcer prevention. Semi-structured interviews were used to gather data from participants (n=16) who were recruited from the non-acute adult medical wards of 14 hospitals in one NHS Trust and a local university. The participants were asked to talk about their experiences of preventing and managing pressure ulcers and their values were elicited from their accounts. The data were analysed and interpreted with Straussian grounded theory.

Nurses were found to work according to the value that they placed on pressure ulcer prevention, as this value influenced the manner in which they prioritised and delivered skin care to their patients. Similar links between nurses’ values and their delivery of care with regards to other aspects of nursing were also identified. The delivery of care to prevent pressure ulcers was found to be subject to clinical priorities and other factors. As a result, the majority of care to maintain skin integrity was delivered by nursing auxiliaries and students because nurses were busy doing other things. Despite this, nurses who place a high value on pressure ulcer prevention appear to be more proactive and determined to deliver care that protects the integrity of their patients’ skin than their peers. This is highlighted by the participants’ accounts of how their prioritisation and delivery of care to prevent pressure ulcers changed when the value that they placed on pressure ulcer prevention increased from low to high. This study also identified the manner in which the value that nurses place on pressure ulcer prevention is formed and evolves.

The recommendations that arise from this study are: further testing of this grounded theory in other settings to increase its generalisability and a greater awareness of the impact that the value that nurses place on different aspects of patient care has on their delivery of care to patients, especially with regards to pressure ulcer prevention. Nurse education and training must also take into account some of the factors that help to form and change the value that nurses place on pressure ulcer prevention. Greater attention needs to be paid to the value that nurses place on different aspects of nursing in view of the relationship between nurses’ values and care delivery, if patients are to receive the best possible care.
Acknowledgements

The contribution of Professor S. Bale, Professor N. Frude, Dr A. Lipp, Reverend Dr M. Maylor, Professor L. Moseley, Professor K. Weeks and all the participants who volunteered to take part in this study is acknowledged with thanks.

The Resurrection, Cookham 1924-7 (Sir Stanley Spencer 1891-1959)

© Tate

(Image used with the permission of the Tate Gallery)
## Contents

List of Tables .............................................................................................................................. 2  
List of Figures ............................................................................................................................. 2  
List of Appendices ...................................................................................................................... 3  
Glossary of terms ....................................................................................................................... 4  
General introduction .................................................................................................................. 6  
Chapter 1: Literature review .................................................................................................... 11  
  1.1 Literature search and evaluation ....................................................................................... 12  
  1.2 Pressure ulcer prevention and nurses ............................................................................... 17  
    1.2.1 The extent of pressure ulcers ..................................................................................... 18  
    1.2.2 The cost of pressure ulcers ......................................................................................... 23  
  1.3 Nurses’ pressure ulcer related practices ........................................................................... 26  
    1.3.1 Pressure ulcer prevention theory and practice .......................................................... 30  
  1.4 Attitude, behaviour and pressure ulcer prevention .......................................................... 33  
    1.4.1 Values and pressure ulcer prevention ........................................................................ 39  
    1.4.2 Nurses’ values and actions .......................................................................................... 42  
Chapter 2: Methodology .......................................................................................................... 45  
  2.1 Choosing a research method ............................................................................................. 45  
    2.1.1 Research methods evaluated ..................................................................................... 48  
  2.2 Selecting a version of grounded theory ............................................................................. 52  
    2.2.1 Ontology and epistemology ........................................................................................ 54  
    2.2.2 Properties, tenets and objectives ............................................................................... 57  
  2.3 Research design ................................................................................................................. 59  
    2.3.1 Gaining informed consent .......................................................................................... 60  
    2.3.2 Interview design.......................................................................................................... 63  
    2.3.3 Plan for recruiting participants ................................................................................... 65  
  2.4 Data collection ................................................................................................................... 67  
    2.4.1 Initial data collection................................................................................................... 69  
    2.4.2 Second stage of data collection .................................................................................. 71  
  2.5 Data analysis ...................................................................................................................... 74  
Chapter 3: Findings and discussion 1 ....................................................................................... 82  
  3.1 Value of pressure ulcer prevention ................................................................................... 82  
    3.1.1 Values and variations in patient care ......................................................................... 86  
  3.2 Clinical priorities and pressure ulcer prevention ............................................................... 89  
    3.2.1 Clinical priorities and care delivery ............................................................................. 92  
  3.3 Other factors that can affect pressure ulcer prevention ................................................... 96  
    3.3.1 Impact of these factors on patient care ....................................................................... 105  
  3.4 Care delivery in practice .................................................................................................. 107  
    3.4.1 The role of nursing auxiliaries ................................................................................... 111  
    3.4.2 Pressure ulcer related nursing documentation ........................................................ 114  
  3.5 Values, other issues and care delivery .......................................................................... 118  
    3.5.1 Support from the MDT................................................................................................. 118  
    3.5.2 Resource provision .................................................................................................... 130  
Chapter 4: Findings and discussion 2 ..................................................................................... 141  
  4.1 Forming a high value of pressure ulcer prevention ......................................................... 141
List of Tables

Table 1.1 Hierarchy of evidence ................................................................. 15
Table 1.2 Grading of recommendations .................................................. 16
Table 2.1 Ethical principles underpinning research protocol ...................... 60
Table 2.2 Initial recruitment target ............................................................ 66
Table 2.3 Demographic details of participants in first stage of data collection 70
Table 2.4 Demographic details of participants in second stage of data collection 73
Table 2.5 Six stages of Straussian grounded theory analysis ...................... 74
Table 2.6 Criteria for a robust core category ............................................ 77
Table 2.7 Criteria for a good memo ............................................................ 79
Table 4.1 Criteria for a robust core category ............................................ 180
Table 5.1 Criteria for rigour in the research process ................................. 196
Table 5.2 Criteria for the robustness of the empirical grounding .............. 201

List of Figures

Figure 4.1: The transition from a low to a high value of pressure ulcer prevention ........ 169
Figure 4.2: Working according to the value placed on pressure ulcer prevention .......... 184
Figure 4.3: Working according to the value placed on pressure ulcer prevention .......... 185
List of Appendices

Appendix 1: Databases searched in literature review ........................................................ 238
Appendix 2: Differences between Glaserian and Straussian grounded theory .............. 239
Appendix 3: EPUAP Pressure Ulcer Classification System (PUCLAS) ............................ 243
Appendix 4: NRES South East Wales approval of amended information sheet ............. 247
Appendix 5: NRES South East Wales confirmation of ethical approval .......................... 248
Appendix 6: University ethical approval ......................................................................... 251
Appendix 7: Trust research approval 1 ........................................................................ 252
Appendix 8: Trust research approval 2 ........................................................................ 254
Appendix 9: Information sheet ..................................................................................... 256
Appendix 10: Consent Form ......................................................................................... 264
Appendix 11: Initial stem questions ............................................................................. 265
Appendix 12: NRES South East Wales approval of progress report ............................ 266
Appendix 13: University extension of ethical approval ................................................... 267
Appendix 14: Trust approval for extension of study ....................................................... 268
Appendix 15: NRES South East Wales approval of extension of study .......................... 269
Appendix 16: Amended stem questions (for nurse educators) ...................................... 270
Appendix 17: Amended stem questions (for senior nurses) ........................................... 271
Appendix 18: Open codes ............................................................................................ 272
Appendix 19: Reorganisation of open codes into sub categories .................................. 274
Appendix 20: Restructuring of subcategories into categories ....................................... 277
Appendix 21: Reclassification of categories into possible core categories .................... 278
Appendix 22: An example of how coding progressed .................................................... 279
Appendix 23: Use of memos in coding ......................................................................... 280
Appendix 24: Publications arising from this thesis ....................................................... 282
Glossary of terms

AWTVNF: All Wales Tissue Viability Nurses Forum

CEBM: Centre for Evidence Based Medicine

CRD: Centre for Reviews and Dissemination

CSCI: Commission for Social Care Inspection

D.H: Department of Health

EBNP: Evidence Based Nursing Practice

EPUAP: European Pressure Ulcer Advisory Panel

MDT: Multi-Disciplinary Team

MRSA: Methicillin Resistant Staphylococcus Aureus

NPUAP: National Pressure Ulcer Advisory Panel

NHS: National Health Service

NHSIAII: NHS Institute for Innovation and Improvement

NICE: National Institute for Health and Clinical Excellence

NIHR: National Institute for Health Research

Nurse: A registered general (adult) staff nurse

POVA: Protection of Vulnerable Adults (a scheme where the care of adults at risk is monitored by public bodies like social services, healthcare organisations and the police)

RCM: Royal College of Midwifery

RCN: Royal College of Nursing

SPH and NHS CASP: Solutions for Public Health and NHS Critical Skills Appraisal Programme

SUNYDMCMRLB: State University of New York Downstate Medical Center Medical Research Library of Brooklyn
Student: An adult branch student nurse

TVN: Tissue viability nurse specialist

Welsh Government: Welsh Assembly Government

WWN: Welsh Wound Network
General introduction

The recurring problem of pressure ulcers

Pressure ulcers are a recurring topic of interest to healthcare professionals and the general public.

Pressure ulcers are estimated to cost £1.8-£4.5 billion per annum which is equivalent to 5% of the total NHS expenditure (Clark 2007; Franks 2007; Postnett and Franks 2007). Pressure ulcers have also been found to cause pain, suffering and mental anguish for patients (Beldon 2006; Riordan and Voegeli 2009; Gorecki, Lamping et al. 2010). This has resulted in a great deal of investment in pressure ulcer prevention by the NHS. There has also been a great deal of effort put into research, education and training on the maintenance of skin integrity by healthcare professionals. Many people believe that most pressure ulcers are preventable if the appropriate interventions are implemented (Berlowitz and Frantz 2007; Barrois, Labalette et al. 2008; Benbow 2008). This view about the preventability of pressure ulcers has underpinned many of the initiatives, policies and guidelines that have been implemented to ensure that patients receive the best possible care to maintain their skin integrity. Nonetheless, there is no apparent reduction in the number of people with a pressure ulcer and the cost of managing pressure ulcers continues to rise (Butler 2008; Gunningberg and Stotts 2008; Buttery and Phillips 2009).

The recurring problem of pressure ulcers has also had an impact on nursing. Pressure ulcer prevention has been identified as a fundamental aspect of nursing care by the national and devolved governments (Welsh Government 2003; D.H 2011a). The code of conduct for nurses in the UK also states that nurses have an obligation to ensure that patients are comfortable, have a good quality of life and are free from pain (NMC 2008b). Some nurses have been found to place a low priority on fundamental aspects of patient care like pressure ulcer prevention (Irurita 1996; Bowers, Lauring et al. 2001). Poor pressure ulcer related nursing documentation is also prevalent in clinical practice (Gunningberg and Ehrenberg 2004; Gunningberg, Fogelberg-Dahm et al. 2009). This indicates that further research is needed to explore the discrepancy between policies and guidelines on pressure ulcer prevention and the care that nurses deliver to their patients.
Given the investment in education and training, one possible explanation for the current situation is that the poor pressure ulcer related care is due to nurses’ attitudes and behaviours. This is an explanation that is being explored by an increasing number of researchers. Most of this research has focused on examining the attitudes of healthcare professionals towards pressure ulcer prevention (Kimura and Pascala 1997; Buss, Halfens et al. 2004). A person’s values have been shown to influence their judgements, attitudes and behaviour (Bernard 2002; Pakizeh 2005). However, there are no studies that have specifically focused on how nurses’ values influence their behaviour and attitude towards pressure ulcer prevention.

**General context**

This study was borne out of my experiences of looking after patients in various healthcare settings and attempting to maintain their skin integrity. Over the course of the last decade, I have looked after many sick patients who have been at high risk of developing pressure ulcers or have had high grade pressure ulcers. In my current role as a nurse in critical care, I have looked after many patients who have been at high risk of death as a result of complications arising from pressure ulcers. Unfortunately, some of these patients died soon after admission to critical care because their disease process was so advanced that there was little that could be done to save their lives.

The patients that we look after on critical care are admitted from other wards in the hospital, but there are many patients who have pressure ulcers that are incorrectly documented or not documented at all in their medical or nursing notes. There have also been many cases where patients have been admitted to critical care from other wards without any up to date care plans on the maintenance of skin integrity. These experiences inspired me to consider why so many patients who have pressure ulcers or are at high risk of skin disintegration do not have accurate or contemporaneous documentation about the measures that have been taken to maintain their skin integrity.

I began to wonder why my nursing colleagues in other settings were not adhering to the policies and guidelines on maintaining skin integrity given that the NHS had investigated a significant amount of resources in pressure reliving equipment and nurse education. A number of questions also came to mind: If nurses are not delivering fundamental care to
prevent pressure ulcers is it because they do not care? If nurses’ attitudes towards pressure ulcer prevention are not consistent with the guidelines for practice, what can be done to change their attitudes? What gives rise to the attitude that a nurse has towards pressure ulcer prevention? If we know what nurses’ attitudes towards pressure ulcers are, then why are there still shortcomings in the care that they deliver?

A literature search revealed that a number of studies had examined nurses’ attitude and behaviour with regards to the maintenance of skin integrity. Most of this research into nurses pressure ulcer related attitude and behaviour has focused on the creation of a robust measurement tool (Beeckman, Defloor et al. 2010). The majority of this research also been based on the idea that if we can accurately measure nurses’ attitudes towards pressure ulcer prevention, then we can improve their clinical practice and reduce the incidence of pressure ulcers. The findings of this research have resulted in the implementation of a number of initiatives to improve the care to maintain skin integrity that patients receive. However, poor pressure ulcer related practices like poor pressure ulcer related documentation continue to be identified (Wann-Hanson, Hagell et al. 2008; Jordan-O’Brien and Cowman 2011). This suggested that perhaps a new research approach was needed if we are to understand and change the pressure ulcer related practices of nurses in clinical practice.

An examination of the evidence on human attitude and behaviour revealed that the way that a person behaves can be affected by many things, but it is primarily influenced by a person’s values. Studies show that values influence a person’s attitude and behaviour to such an extent that they have an observable behaviour pattern that is consistent with their values (Hall 1997; Bernard 2002). This raised the prospect that understanding nurses’ values with regards to pressure ulcer prevention provides greater scope for changing nurses’ attitudes and behaviour towards the maintenance of skin integrity and the skin care that they delivered to their patients.

Given that there had been no study which had solely focused on ascertaining the value that nurses place on pressure ulcer prevention, I decided to undertake this study and find out the value that nurses place on pressure ulcer prevention. Different ways of ascertaining a person’s values were examined before the start of this study. Traditionally, a person’s
values have been ascertained by asking them to compare the importance of one thing to another on a predetermined list of values (Goodwin 2001; Pekki-Erikkila 2003). The value that nurses place on pressure ulcer prevention has not been previously examined and pressure ulcer prevention incorporates so many other aspects of nursing, that the use of a predetermined list would have been inappropriate. So, a different approach to eliciting values was needed.

The need for an alternative approach eliciting the value that nurses place on pressure ulcer prevention was also highlighted by the fact that the term value is ambiguous as people use it to refer to different things. This might be due to the fact that values are a human construct and not a physical object (Hebel 1998). As a result, definitions of value range from a portmanteau-like concept seeking meaning to economic descriptions of utility (Hall 1997; Pakizeh 2005). So, it was decided to use an unobtrusive measure to elicit the value that nurses place on pressure ulcer prevention. In other words, I decided to ascertain the value that nurses place on pressure ulcer prevention without using the word value because it means different things to different people.

In recent times, many researchers have realised that a more subtle way of measuring values is needed. This is due to recognition of the impact that context has on values (Goodwin 2001). Rather than using predetermined lists of values, relatively recent studies have opted to elicit people’s values qualitatively by asking them what they find meaningful in their lives (Johnson 1983; Pekki-Erikkila 2003). This approach has been popular as it has proven to be more effective than using predetermined lists of values in nursing research as highlighted by Koerner’s (1993) study. To put it succinctly, the research shows that the best way of gaining an insight into the values of healthcare professionals like nurses is asking them to talk about their experiences and what is important to them.

**How this study is set out**

The review of literature in the first chapter sets out what is known about nurses’ values especially in relation to pressure ulcer prevention. The following chapter will review the different research approaches that were considered and how this led to the selection of one research method for this study. The manner in which data were collected and the rationale underpinning this process will then be examined. The next two chapters will discuss the
findings of this study alongside the relevant literature and research. This will segue into the final chapter which integrates the findings of this study and evaluates its significance and original contribution to knowledge. This thesis concludes with a statement of the implications of this study for theory, practice and future research.

It is believed that this study provides novel information on the value that nurses’ place on pressure ulcer prevention, how this value is formed and how this value is reflected in practice. This study also highlights factors that can impinge on nurses’ ability to practice in a manner that is consistent with their values, some of which have not been previously identified. New knowledge on the relationship that the value that nurses place on different aspects of nursing affect their manner in which they deliver patient care is also introduced by this study. Other studies have examined nurses’ attitudes and behaviour towards pressure ulcer prevention. Some of these studies have extrapolated values from nurses’ attitudes towards pressure ulcer prevention. No study has directly sought to establish the value that nurses place on pressure ulcer prevention. Therefore, the objective of this study was to ascertain the value that nurses place on pressure ulcer prevention.
Chapter 1: Literature review

Introduction

Pressure ulcers have long been a topic of interest. This interest can be traced back to the 16th century when archaeological evidence of the existence of pressure ulcers in Pharaonic times was first reported (Moore 2004; Benbow 2007). Formal scientific interest in pressure ulcers and their prevention began in 19th century (Levine 2005; Cherry 2006; Sayar, Turgut et al. 2008). This interest has led to a large amount of research and publications on pressure ulcers, as the first six months of 2006 saw the publication of 60 new peer reviewed papers (EPUAP 2006). While not all of these papers were research studies, it shows that pressure ulcers are a popular area for research and discussion.

Most of the studies that have been undertaken on pressure ulcers do not utilise the more popular scientific designs such as randomised controlled trials, which sit at the top of the hierarchy of evidence (see Table 1.1 on page 15). This has meant that many of the guidelines on pressure ulcers and their prevention are based on a combination of evidence that sits lower in the hierarchy of evidence and expert opinion. Even though the majority of research evidence on pressure ulcers comes from studies that are low on the hierarchy of evidence, many of these studies are robust. All of the guidelines on pressure ulcer prevention are based on systematic reviews of the best available evidence (NICE 2001a; EPUAP 2005a; EPUAP and NPUAP 2009a). These systematic reviews have appraised the quality of evidence that is available on pressure ulcers with a hierarchy of evidence to establish the significance of the findings of each study in the review (RCN 2001; EPUAP and NPUAP 2009a). A similar approach was taken to the appraisal of the evidence that was obtained in this literature search. The literature that will be reviewed in this chapter will be used to establish the value that nurses place on pressure ulcer prevention in later chapters.

This chapter will set out how the literature that underpins this research study was sought, obtained and reviewed. The first half of this chapter examines the emphasis that has been placed on pressure ulcer prevention and what impact this has had on the cost and extent of pressure ulcers and the calibre of skin care that patients receive. This will be followed by the critical appraisal of the evidence on pressure ulcer prevention and nursing, which led to the generation of the research question for this study.
1.1 Literature search and evaluation

The search for literature was undertaken methodically using a search strategy. The strategy that was used to search for literature in this study was primarily based on the criteria for finding studies for a systematic review (CEBM 2009; CRD and NIHR 2010).

Some of the criteria that are used in identifying literature for systematic reviews were primarily designed for medical studies and are not ideal for some nursing studies. Thus, the researcher synthesised these criteria with the criteria used for searching for nursing literature (EBNP 2004; NICE 2009). This ensured that the literature that was obtained included nursing studies, which was important as this study is about nurses. These search criteria were selected because they are the used to select evidence for systematic reviews which sit at the top of the hierarchy of evidence and are used to inform policy and practice. This search strategy was also used because the objective of the literature search was to identify literature on nurses’ values and pressure ulcer prevention.

The use of a clearly defined and recognised literature search strategy would also help to ensure that all the pertinent literature was identified. This in turn would ensure that this study was underpinned by a rigorous literature review that integrated the best available evidence from the appropriate sources. The use of the best and most up to date evidence from systematic research that is available, coupled with clinical expertise is vital to ensuring that the best decisions are made about patient care (Sackett, Rosenberg et al. 1996). In other words, the delivery of effective evidence based care in clinical practice is predicated on the best and most up to date evidence.

The key words “nurses”, “values” and “pressure ulcer prevention” were used in the search for literature. Other derivatives of the key words such as “nursing”, “nursing students”, “value”, “pressure sores”, “decubitus sores” and “decubitus ulcers” were also utilised in the search for associated, relevant literature. A wide range of literature was obtained from peer-reviewed journals, theses, books and conference proceedings from over 50 computerised nursing and psychology databases. (A full list of all the databases that were used is given in appendix 1 on page 238.) The only restriction on the literature search was that it was limited to documents that were written in English. This extensive literature search began in April 2005 and concluded a month before this thesis was submitted. This
literature search identified over 1000 pieces of literature on pressure ulcers and over 200 works on values.

Once each piece of literature had been identified, it was appraised for its methodological rigour, research design and clinical significance. Each piece of literature was appraised using the most relevant evaluative criteria by the researcher, for example qualitative studies were appraised using the evaluative criteria for qualitative studies. This ensured that each piece of literature was appraised appropriately. The literature was evaluated with recognised criteria for the appraisal of different types of evidence (Greenhalgh 2001; Guyatt, Rennie et al. 2008; CEBM 2009; SPH and NHS CASP 2010). Thus, all the literature obtained was appraised using robust and pertinent research appraisal tools.

The evaluation of the literature obtained also sought to establish the position of each piece of literature on the hierarchy of evidence. Hierarchies of evidence were created in order to enable studies that use different research methods to be evaluated according to the validity of their findings (Evans 2003). Hierarchies of evidence are also used to evaluate the level of evidence that supports the recommendations for clinical practice that are published in different guidelines. So, the researcher felt that the use of a hierarchy of evidence and its associated grading of recommendations in the appraisal of literature would also help to discern the validity of the findings of different research studies.

**Qualitative studies and the hierarchy of evidence**

The hierarchy of evidence that was used to evaluate the literature that was obtained in this study does not include qualitative studies because of the type of evidence that it was designed to evaluate. The hierarchy of evidence is best suited to quantitative studies which are designed to test theories and often to examine cause and effect (Greenhalgh 1997; Creswell 2003). Qualitative studies are normally used to shed light on a new topic area, because they generate theories that takes into account complex and contextual factors (Patton 2002; Creswell 2007). Therefore, the hierarchy of evidence is more suited to quantitative studies and only of limited relevance to qualitative studies which are well respected for what they do (Petticrew and Roberts 2003). This means that the position of this qualitative study on the hierarchy of evidence isn’t the sole arbiter of its quality and the significance of its findings must be established in other ways.
The hierarchy of evidence that was used to evaluate the literature in this study also excluded qualitative research studies for other reasons. There are no universally accepted criteria on how to evaluate qualitative research studies, which has led to the publication of a variety of different evaluative criteria (Spencer, Ritchie et al. 2003; Rolfe 2006; Walsh and Downe 2006). Some of these evaluative criteria are contradictory, which perhaps is a reflection of the fact that they are all based on different intellectual positions regarding the evaluation of qualitative research (Popay, Rogers et al. 1998; Sandelowski and Barroso 2002; Spencer, Ritchie et al. 2003). Many of the evaluative criteria for qualitative studies consider the provision of an audit trail, the use of participant validation, independent review and reflexivity as measures of the rigour of a study (Morse, Barrett et al. 2002; Meyrick 2006; Richards and Morse 2007). This would appear to suggest that these four criteria are a good way of evaluating all qualitative studies.

Using these four criteria to evaluate qualitative studies may not always be appropriate. Each qualitative approach has its own unique ethical, political and philosophical considerations; which must be taken into account when these studies are appraised (Annells 1997a; Annells 1999). This indicates that a better way to ascertaining the trustworthiness of qualitative research might be to use a set of paradigm specific evaluative criteria (Cutcliffe and McKenna 1999; Spencer, Ritchie et al. 2003). The use of multiple paradigm specific criteria makes it challenging to compare qualitative studies with different approaches (Cutcliffe and McKenna 1999; Slevin and Sines 1999). Nonetheless, the researcher decided that the best way to evaluate qualitative studies was to use multiple paradigm specific criteria.

The unique properties of qualitative studies make it difficult to compare them to other studies in a conventional hierarchy of evidence. The position of qualitative studies on the hierarchy of evidence depends on the research question that is asked (Sackett and Wennberg 1997), but they are generally perceived to be lower than quantitative studies when it comes to the outcomes of an intervention undertaken on a large population (Petticrew and Roberts 2003). Thus, qualitative studies were omitted from the hierarchy of evidence because they do not have a clearly defined position. Instead, each qualitative study that was obtained was evaluated with paradigm specific criteria as will be shown in subsequent sections.
The hierarchy of evidence used in this study

Researchers and research organisations use different versions of the hierarchy of evidence to evaluate research studies because there is no universally accepted hierarchy of evidence. There are number of different hierarchies of evidence, each with its own subtle nuances (Bennett and Emberson 2008; CEBM 2009; NICE 2009). Perhaps, this is due to the fact a hierarchy of evidence is a flexible guide for the evaluation of research studies and not a dogmatic set of rules to be obeyed without question (Evans 2003).

The researcher opted to synthesise some of the best known hierarchies of evidence into a simplified format that was used to appraise the evidence that was identified in this literature search. This simplified hierarchy of evidence and its concomitant grading for recommendations are set out in table 1.1 below and table 1.2 on page 16 respectively.

**Table 1.1 Hierarchy of evidence**
Adapted from Harris, Helfand et al. (2001), SUNYDMCMRLB (2004) and CEBM (2009).

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Example/ possible source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strong evidence from at least one systematic review of well-designed randomised controlled trials (RCT’s)</td>
<td>Meta-Analyses/ the Cochrane collaboration database of systematic reviews</td>
</tr>
<tr>
<td>2</td>
<td>Evidence from at least one properly designed RCT of appropriate size</td>
<td>Peer reviewed papers published in journals/ the DARE database</td>
</tr>
<tr>
<td>3</td>
<td>Evidence from well-designed trials without randomization including cohort, time series or matched case controlled studies</td>
<td>Articles published in peer reviewed journals/Embase</td>
</tr>
<tr>
<td>4</td>
<td>Evidence from well-designed non-experimental studies from more than one centre or research group</td>
<td>Articles published in peer reviewed journals/Embase and Embase</td>
</tr>
<tr>
<td>Level</td>
<td>Description</td>
<td>Example/ possible source</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Opinions from respected authorities, based on clinical evidence, descriptive studies or reports from committees</td>
<td>Clinical guidelines/NICE publications</td>
</tr>
<tr>
<td>6</td>
<td>Views of colleagues/peers</td>
<td>Nursing colleagues or members of the multidisciplinary team</td>
</tr>
<tr>
<td>7</td>
<td>Animal research</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>In vitro research</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1.2 Grading of recommendations**

Adapted from Harris, Helfand et al. (2001) and SUNYDMCMRLB (2004) and CEBM (2009).

<table>
<thead>
<tr>
<th>Grade</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Directly based on level 1 evidence</td>
</tr>
<tr>
<td>B</td>
<td>Directly based on level 2 evidence or extrapolated from level 1 evidence</td>
</tr>
<tr>
<td>C</td>
<td>Directly based on level 3 evidence or extrapolated from level 1 or 2 evidence</td>
</tr>
<tr>
<td>D</td>
<td>Directly based on level 4 evidence or extrapolated from level 1, 2 or 3 evidence</td>
</tr>
</tbody>
</table>

Having established how the literature was obtained and evaluated, the remainder of this chapter will review the most pertinent pieces of literature on pressure ulcers, nurses and values that were identified. This appraisal of literature will also highlight why the value that nurses place on pressure ulcer prevention was a topic that merited investigation. Any other pertinent literature that was identified will be integrated into the appropriate sections of this thesis.
1.2 Pressure ulcer prevention and nurses

Pressure ulcer prevention has long been a priority for nurses. This interest appears to have begun with the publication of Florence Nightingale’s (1859) seminal treatise on nursing in which she argued that most pressure ulcers could be prevented with good nursing care. This assertion was merely an opinion that was not underpinned by any robust research evidence, but it led to the recognition of the key role that nurses can play in preventing pressure ulcers. Nonetheless, the role that nurses can play in pressure ulcer prevention has been highlighted in subsequent studies.

In more recent times, the role that nurses can play in pressure ulcer prevention has come to be understood more clearly. Nurses play a pivotal role in pressure ulcer prevention because they are directly involved in key aspects of pressure ulcer prevention like risk assessment and patient repositioning (Arblaster 1998; Bolton, Donaldson et al. 2007). Pressure ulcer prevention has also become a key part of nursing care that is emphasised in government guidelines for clinical practice (D.H 2001; Welsh Government 2003). The role of nurses in the prevention of pressure ulcers has also been highlighted in a number of national and international guidelines published by the RCN (2001), NICE (2001a; 2001b), the EPUAP (2005a) and the EPUAP and NPUAP (2009a). As a result, pressure ulcer prevention is now viewed as a fundamental part of nursing care.

Pressure ulcer prevention is also important to nurses for other reasons. The nursing profession has a number of key values like ensuring that patients are comfortable, have a good quality of life and are free from pain. These core nursing values are enshrined in the code of conduct for nurses in the UK (NMC 2008b). Consequently, pressure ulcer prevention is important to nurses because it ensures that patients are free from pain and have a good quality of life.

The importance of pressure ulcer prevention to nurses has also been highlighted in other ways. Pressure ulcer prevention has been set out as a benchmark for the calibre of nursing care in publications like the Essence of Care (D.H 2011a), Fundamentals of Care (Welsh Government 2003), State of the Art Metrics for Nursing (Griffiths, Jones et al. 2008) and High Impact actions for Nursing (NHSIIAI, RCM et al. 2009). In England, pressure ulcer prevention is recognised as one of the key indicators of the quality of nursing care in key
policy and practice drivers like the under the Commissioning for Quality and Innovation (CQUIN) payment framework (D.H 2008b) and the Quality, Innovation, Productivity and Prevention programme (D.H 2011b).

The recognition of pressure ulcers as an indicator of the calibre of nursing care appears to be one of the main reasons why the NHS has invested a lot of money in pressure relieving equipment and educating healthcare professionals throughout the UK in an attempt to reduce the number of people who have pressure ulcers. In Wales, this added emphasis on pressure ulcer prevention is epitomised by the fact that the Welsh Government provides support and on occasion funding to not for profit organisations like the WWN and the AWTVNF. The WWN and the AWTVNF provide educational resources, advice and support with regards to the maintenance of skin integrity and other aspects of tissue viability to nurses and other healthcare professionals in Wales. Many of the guidelines and recommendations from these two organisations have been adopted by healthcare professionals in other parts of the UK. So, the measures taken by the NHS, government and other interested parties have reinforced the priority of pressure ulcer prevention to nurses.

The maintenance of skin integrity has always been a priority for nurses. Pressure ulcer prevention is not only a fundamental part of nursing care, but it has also come to viewed as an indicator of the calibre of nursing care that patients receive. A great deal of time, effort and money has been spent to ensure that nurses are adequately educated and equipped to prevent pressure ulcers. Therefore, it is important to establish what impact these measures have had on the number of people with pressure ulcers and the cost of treating pressure ulcers. These two issues will be examined more closely in the next two sections.

1.2.1 The extent of pressure ulcers

There has been a lot of emphasis placed on pressure ulcer prevention especially in nursing, but the number of people that have been found to have pressure ulcers in prevalence and incidence studies does not appear to have changed.

The number of people who have been found to have pressure ulcers in different studies varies tremendously. More than 50 US and European studies published between 1988 and 2008 report a pressure ulcer prevalence rate of 3.5% to 83.6% (Bours, Halfens et al. 2002; Aronovitch 2007; Barrois, Labalette et al. 2008). The difference in the reported prevalence
of pressure ulcers might be due to methodological variations. These variations include the use of different data collection tools and the reported grades of pressure ulcers (Bours, Halfens et al. 2002; Barrois, Labalette et al. 2008).

Some studies have such a poor methodological design that have measured both the pressure ulcer incidence and prevalence but reported their results as the pressure ulcer prevalence (Aronovitch 2007). This appears to be due to the difficulties that the researchers have faced in identifying the incidence of pressure ulcers in these studies. These methodological variations in these studies make it very difficult to make any meaningful comparisons between different prevalence or incidence studies (Colin 2006; Dassen, Tannen et al. 2006; Clark 2007). This means that it is difficult to be certain about the exact number of people with pressure ulcers and any figures that are quoted from incidence and prevalence studies must be used with caution.

There are a few pressure ulcer incidence and prevalence studies whose results are widely accepted despite the difficulty of accurately identifying the number of patients with pressure ulcers. Knowing the number of people with pressure ulcers is important because it influences the amount of resources that are dedicated to pressure ulcer prevention and management by the NHS and other interested parties. Therefore, it is important to ensure that the key literature on pressure ulcer prevalence and incidence is appropriately evaluated.

An EPUAP pressure ulcer prevalence study reported that 1078 or 18.1% of the 5974 hospitalised patients in five European countries had a pressure ulcer (Clark, Defloor et al. 2004; Vanderwee, Clark et al. 2007). In the UK arm of this study, 556 or 21.9% of 2544 patients in the 15 hospitals surveyed had a pressure ulcer (Vanderwee, Clark et al. 2007). This study found that the UK had the second highest national pressure ulcer prevalence rate of 21.9% amongst the five nations that participated in this study (Clark, Defloor et al. 2004). The number of participants that were recruited from each country in this study was not the same, so it is difficult to make any meaningful comparisons about pressure ulcer prevalence.

This EPUAP study has its share of strengths and limitations. This study was a pilot that used a convenience sample of voluntary participants from 25 university and general hospitals across Europe (Clark, Defloor et al. 2004). The fact that a convenience sample was used
rather than a randomly selected sample mean that the results of this EPUAP study cannot be taken to be representative of all the hospitalised patients in Europe. The voluntary element of this study could have meant that institutions with a higher prevalence of pressure ulcers could have opted out of participating in this study, while institutions with a low prevalence would have volunteered to participate in this study.

The skin of all the patients in this study were reviewed by two people and their inter-rater reliability of pressure ulcer grading was above 0.9 and statistically significant with a p-value < 0.001 (Vanderwee, Clark et al. 2007). The results of this study cannot be generalized across Europe because this study recruited different number of participants from each country, but high inter-rater reliability indicates that the results of this study are significant. This study was seminal because it attempted to overcome some of the methodological variations in previous studies by piloting a standardised way of measuring pressure ulcer prevalence in Europe.

A subsequent study found that 91 (18.1%) of 1644 patients from five NHS trust in England had a pressure ulcer (Drew, Postnett et al. 2007). This pressure ulcer prevalence rate is broadly similar to that of many other UK studies. However, 1218 (74.1%) of the 1644 patients in this study were in the community under the care of district nurses (Drew, Postnett et al. 2007). This implies that there the same number of patients in the community who have pressure ulcers as there are in acute care settings like hospitals. This study is distinct from many other prevalence studies because it includes patients in the community, while other studies have predominantly focused on hospitalised patients. However, Drew, Postnett et al.’s (2007) study had a relatively small sample of 1644 in comparison to other prevalence studies especially those undertaken in the UK. This limits the extent to which its results can be applied to other settings.

This study was not designed to be a pressure ulcer prevalence study, but its objective was to ascertain the costs of wound care for a local English population. Nonetheless, this study reported a number of interesting findings about the duration and prevalence of pressure ulcers. This study found that the average length of time that a patient had a pressure ulcer in their study was between six and twelve weeks and one in ten patients had a pressure ulcer that had failed to heal for more than a year (Drew, Postnett et al. 2007). Even though
this study has its limitations, its results suggest that the pressure ulcer prevalence in the UK is broadly the same even when patients in the community are taken into account.

A recent prevalence audit of 44 different acute care facilities in England and Wales found that 10.2-10.5% of up to 30,000 patients developed a pressure ulcer every year between 2005 and 2008 (Buttery and Phillips 2009). This audit gathered data through clinical assessment and the review of patients' nursing noted and identified that more than half of the patients who had pressure ulcers every year had acquired them while they were being looked after in an acute care facility (Buttery and Phillips 2009). The extent to which the findings of this audit of the care to maintain skin integrity can be generalised to all acute care settings in the UK is limited because it was undertaken in 44 institutions who received their pressure relieving equipment from one company. Even though this audit has limited generalisability, it provides an important insight into the extent of pressure ulcers in the UK. It particularly highlights the fact that many people develop pressure ulcers while they are in acute care facilities like hospitals.

There are a number of estimates about the incidence of pressure ulcers in the UK. The most cited figures are from a study that was undertaken by Bennett, Dealey et al. (2004). This study estimated that 412,000 people developed a new pressure ulcer in the UK every year (Bennett, Dealey et al. 2004). This estimate was based on an assumed UK average pressure ulcer incidence of 4% per annum in the year 2000 because there were very few up to date UK incidence studies at the time that these calculations were made (Bennett, Dealey et al. 2004). Therefore, the number of people who develop pressure ulcers in the UK could be higher or lower. However, it must be acknowledged that the exact quantification of the incidence of pressure ulcers is very difficult (Benbow 2007). The estimates from this study may not be accurate, but they are best available figures and they have been used to inform clinical practice.

Recent literature reviews suggest that there are 22-23,000 patients in hospital with a pressure ulcer at any given time and that 4-10% of hospitalised patients develop a nosocomial pressure ulcer (Postnett and Franks 2007; Butler 2008). The epidemiological studies that were reviewed reported a case mix unadjusted pressure ulcer prevalence rate of 5-32% of all UK hospital patients (Butler 2008). These figures are based on reviews of key
pressure ulcer prevalence and incidence studies. However, these studies have methodological differences, which made it challenging to ascertain the significance of their findings (Postnett and Franks 2007). These reviews highlight the fact that there are very few robust studies which have sought to identify the number of people with pressure ulcers in the community, even though there are many people with pressure ulcers in the community (Postnett and Franks 2007). So, there are potentially a large number of patients in the community with pressure ulcers who are being overlooked in prevalence and incidence studies. These reviews have limited generalisability, but they highlight the number of people who have pressure ulcers.

Official government figures also highlight the extent of pressure ulcers. The most recent UK government figures of the number of hospitalised patients with diagnosed pressure ulcers are 15,292 in 2001-2002, 17,178 in 2002-2003 and 18,087 in 2003-2004 (Byrne 2005). However, these figures might be an underestimation because they report the number of hospital in patient care episodes with a specific diagnosis code of a pressure ulcers (Butler 2008). Hence, it is possible that there are many other patients who may have had pressure ulcers that were undiagnosed or were not the primary diagnosis for that patient.

None of the studies on pressure ulcer prevalence or incidence has findings that can be widely generalised because of a number of different factors. There a number of challenges that are associated the accurate measurement of the pressure ulcer prevalence in any given setting. Firstly, there is no universally accepted measurement tool and a large number of appropriately trained people are needed to accurately measure the number of people with a pressure ulcer over a defined period. In addition, a prevalence study only measures the number people with pressure ulcers at a single point in time which may not reflect other points in time. The accurate measurement of pressure ulcer incidence faces its own challenges. The measurement of pressure ulcer incidence requires that those monitoring patients on a daily basis are able to correctly recognise and grade tissue damage accurately. If this is not possible, the results that are obtained from any such study are inaccurate. Unfortunately, there are very few pressure ulcer prevalence or incidence studies that live up to these ideals.
Pressure ulcer and incidence studies have their limitations, but the best available evidence that we have suggests that the number of patients with pressure ulcers is static. This is epitomised by the fact the pressure ulcer incidence of 24% after admission to hospital from UK government figures from 2001-2003 is similar to the pressure ulcer incidence reported in Norton, McLaren et al.’s (1962) study. This suggests that the better part of 50 years research into pressure ulcers and their prevention has not led to any reductions in the number of people with pressure ulcers. There may be other reasons why the incidence of pressure ulcers may appear to be static such as improvements in the reporting of pressure ulcer prevalence and incidence between the 1962 and 2003. Whatever the explanation may be, the number of people with pressure ulcers does not appear to have changed.

In the years to come, pressure ulcers are expected to become more common as the number of people who are predisposed to tissue damage like the elderly increases (Riordan and Voegeli 2009). Having considered the extent of pressure ulcers, it is now time to consider how much they cost the individual and society.

1.2.2 The cost of pressure ulcers

Accurately estimating the financial costs of managing pressure ulcers is just as challenging as measuring the pressure ulcer prevalence and incidence. This is because the cost of managing pressure ulcers depends on the number of patients who are reported to have pressure ulcers (Postnett and Franks 2007; Ousey 2010). Nonetheless, the results of a few studies have been used to inform government policy and guidelines.

The cost of managing pressure ulcers in long term care facilities in the UK is estimated to be between £1.43-£2.14 billion per year, which is equivalent to 4.1% of the NHS’s gross expenditure on healthcare (Bennett, Dealey et al. 2004). The majority of this figure (90%) is attributed to the additional nursing time that is required to look after patients with pressure ulcers (Bennett, Dealey et al. 2004). The extent to which these estimates can be applied to other settings like patients in the community is open to question. This is because these estimates are predicated on the assumption that the people who developed a pressure ulcer had been admitted to a long term care setting because of some other condition. This suggests that these calculations did not include the costs of looking after patients who were admitted to a long term care facility because of a pre-existing pressure ulcer. This may be an
unfair criticism, but it would have been reasonable to expect that these estimates would have included patients who were admitted because of their pressure ulcer. Despite the limitations of this study, its estimates appear to be the best that are available. This is epitomised by the fact that these estimates have been cited in key government publications like High Impact Actions for Nursing (NHSIIAI, RCM et al. 2009).

The overall financial costs of pressure ulcers are thought to be even higher. The cost of managing pressure ulcers in the UK is estimated to be between £1.8-£4.5 billion per annum or 5% of the total NHS expenditure (Clark 2007; Franks 2007; Postnett and Franks 2007; Butler 2008; Benbow 2009). The estimates are predicated on reviews of a number of studies, but they exclude associated costs the patient’s lost earnings and legal costs. Most estimates of the financial costs of pressure ulcers exclude patients who are in the community, which means that these figures are probably not an accurate estimate (Postnett and Franks 2007; Ousey 2010). The financial costs of pressure ulcers are useful for understanding the impact that pressure ulcers have on society, but they are only estimates and must be used accordingly.

There may be some debate about the exact costs of managing pressure ulcers, but the general trend that emerges from different studies and reviews suggests that the cost of managing pressure ulcers rise with every year that passes. Estimates of the cost of treating pressure ulcers in the UK have risen from £60 million in the 1970s (Fernie 1973) to £755 million in 1990s (West and Priestley 1994). In early 1990s, the estimates used by the government put the cost of managing pressure ulcers at between £60 and £321 million (D.H and Touche Ross and Co 1993). The number of people with pressure ulcers does not appear to have changed between the 1970s and 1990s, but these estimates show how the costs of treating pressure ulcers have increased significantly during this period of time. Many of these estimates are taken from literature reviews which were undertaken many years ago, which means that they may be of limited relevance in 2011. Despite this, these estimates highlight the fact that the costs of managing pressure ulcers are continually rising.

Pressure ulcers have other deleterious effects on the individual and society. These include things like pain, suffering and mental anguish for patients (Barrois, Labalette et al. 2008; Riordan and Voegeli 2009; Gorecki, Lamping et al. 2010). These side effects of pressure
ulcers are very difficult to quantify numerically (Bick and Stephens 2003; Baranoski 2006). There is some evidence which shows that pressure ulcers and other associated complications can result in death, but the exact nature of this relationship is unclear (Abdel, Warren et al. 2005; Thomas 2006; Berlowitz and Frantz 2007). These side effects of pressure ulcers have not, as yet, been subjected to the same level of scientific scrutiny as other medical conditions (Franks 2007). This means these negative effects of pressure ulcers are not supported by the same level of robust evidence as other medical conditions.

The most influential insights into the impact of pressure ulcers on patient’s lives have been provided by qualitative studies. These studies have played a pivotal role in highlighting the negative impact that pressure ulcers have on the lives of patients (Clark 2007; Franks 2007). The two most cited studies of patients experiences of living with a pressure ulcer are by the EPUAP (Hopkins, Dealey et al. 2006) and Spilsbury, Nelson et al. (2007), which had different research methods and populations, but reported similar findings.

The EPUAP study had eight participants aged between 65 and 101 who had a grade three or four pressure ulcer for more than a month from three English and one Belgian hospital (Hopkins, Dealey et al. 2006). Most of these patients were being looked after in the community at the time this study was undertaken and the data was interpreted via Heideggerian interpretative phenomenological analysis to interpret the data (Hopkins, Dealey et al. 2006). The other study recruited 23 English hospital inpatients aged between 33 and 92, who had a pressure ulcer that was a grade two or worse and interpreted the data gathered through thematic analysis (Spilsbury, Nelson et al. 2007).

The findings of these qualitative studies provided a valuable insight into the impact that pressure ulcers have on people’s lives. These studies identified three different themes, which are the limited knowledge of the carers of patients with pressure ulcers; the pain caused by pressure ulcers and the need for repeated stressful treatments (Hopkins, Dealey et al. 2006; Spilsbury, Nelson et al. 2007). These three different themes are common in most self-reported quality of life studies into the experiences of patients living with pressure ulcers (Clark 2007). This suggests that these studies identified some of the main issues that affect people who have pressure ulcers.
These two qualitative studies have other similarities and differences. In both studies, data were collected via interviews, translated and transcribed before being analysed (Hopkins, Dealey et al. 2006; Spilsbury, Nelson et al. 2007). The EPUAP study was a pilot designed to test the research methodology and design, which had a small number of participants (Hopkins, Dealey et al. 2006). This limits the extent to which its findings can be applied to other settings, but its findings are validated by the results of other studies. In any case, qualitative studies are not designed to be generalizable like quantitative studies.

Pressure ulcer prevention is a fundamental part of nursing care, but the evidence indicates that the number of patients with a pressure ulcer is static and the cost of treating pressure ulcers is rising. Nurses are known to play a pivotal role in pressure ulcer prevention and the current scenario raises some questions about the calibre of skin care that is delivered by nurses in clinical practice. Having established the extent and cost of pressure ulcers, the next section will examine nurses’ pressure ulcer related practice in greater detail.

1.3 Nurses’ pressure ulcer related practices

Pressure ulcer prevention is an integral part of nursing, but there is evidence that most patients in clinical practice do not receive an appropriate level of care to maintain their skin integrity.

A Dutch pressure ulcer point prevalence study reported that less than 33% of 16 344 patients had received the appropriate interventions to prevent pressure ulcers and only 53% of patients in this study who needed pressure relieving equipment actually received it (Bours, Halfens et al. 2002). This study was a survey which sits in the middle tiers of evidence. However, the fact that it recruited a large number of participants from a large number of settings suggests that its findings may be worth noting. This study also used a data collection instrument that had been designed by 34 experts through a Delphi study, which arguably augmented its methodological rigour. The main limitation of this study is the fact that the healthcare settings that were surveyed had to pay to take part (Bours, Halfens et al. 2002). This could have biased data collection as the institutions that did not have sufficient financial resources could not take part in this study. It could also be argued that
this financial imperative would have provided institutions with high prevalence of pressure ulcers with a convenient excuse for not taking part in this study.

A subsequent EPUAP pilot point prevalence survey study found that 2012 (79%) of the 2544 patients in the UK arm of this Pan-European study who were at risk of developing pressure ulcers did not receive any care to maintain their skin integrity (Clark, Defloor et al. 2004; Vanderwee, Clark et al. 2007). In this study, only 233 (9.3%) of 2505 UK patients and 32 (0.97%) of 3287 patients from continental Europe in this study who were at risk of developing pressure ulcers received an appropriate level of skin care (Clark, Defloor et al. 2004). This means that in total only 265 (4.5%) of the 5947 patients in this study received an adequate level of care to maintain their skin integrity.

The average inter-rater reliability for grading pressure ulcers in this study was >0.9 using a two tailed Spearman’s rho correlation coefficient test (Vanderwee, Clark et al. 2007). The high level of inter-rater reliability bolsters the validity of the results of this study. This EPUAP study was a pilot survey with a convenience sample, so the extent to which its findings can be generalized is limited. This study used a data collection tool that had been specially designed by the leading European researcher, which adds credence to its findings. The results of this study also highlight the large number of European patients who seem to receive a poor quality of pressure ulcer related care.

The findings of the EPUAP study have been augmented by the results of two Swedish cross-sectional point prevalence surveys. The first study surveyed 612 patients in one hospital identified that only 30 (40.5%) out of 74 patients who were identified as being at risk of pressure ulcer formation received appropriate preventative interventions (Gunningberg 2005). Only 46 (31.5%) out of 146 patient with pressure ulcers in this study received the appropriate level of care (Gunningberg 2005). This means that 144 (65.4%) of the 220 patients who were identified as having a pressure ulcer or at risk of developing a pressure ulcer received sub-standard skin care. The average inter-rater reliability of pressure ulcer grading in this study was high at 0.75 using Cohen’s kappa coefficient (Gunningberg 2005). This suggests that the results of this study are worth noting.

The second Swedish study of 535 patients from one hospital found that only 32 (60%) of the 53 patient with pressure ulcers on admission and 47 (66%) of the 71 patients with
nosocomial pressure ulcers received the appropriate level of skin care (Wann-Hanson, Hagell et al. 2008). The data in this study were analysed with SPSS 12 and p-values varied from <0.0001 to 0.646, but only two tailed p-values of <0.05 were taken to be statistically significant (Wann-Hanson, Hagell et al. 2008). At first glance, this would appear to have bolstered the rigour of this study. However, the manner in which the data were gathered was not entirely consistent with the use of parametric statistics, so the majority of variables are described in terms of non-parametric statistics (Wann-Hanson, Hagell et al. 2008). This may diminish the generalisability of the results of this study, but other recognised statistical tests like multiple logistic regression analysis, Mann-Whitney U and Chi-square tests were also used in data analysis.

The extent to which these recognised statistical tests may augment the significance of the findings of this study is open to question. This is because multiple statistical tests were used to analyse the data in this study in a manner that was sometimes unconventional, for example the use of multiple logistic regression analysis is normally limited to normally distributed data. The use of a number of statistical tests also raises questions about the design of this study. Nonetheless, the results of this study pertaining to the number of patients who receive an appropriate level of care appear to be valid as they were objectively verified by the researchers through direct observation and the use of a recognised pressure ulcer risk assessment score.

These Swedish surveys report a number of important findings about nurses’ pressure ulcer related practices, but it is challenging to ascertain the significance of their results in comparison to other studies of a similar nature. The differences in the number of patients who received the appropriate care to prevent pressure ulcers in these two studies compared to other studies may be due to variations in the settings. These two Swedish studies had less than 700 participants, which is less than that of the other point prevalence studies that have been reviewed. The smaller number of participants in these Swedish surveys may explain why they appear to have a number of patients who receive an appropriate level of maintain their skin integrity in comparison to the other point prevalence studies that have been reviewed. The differences between the results of these Swedish studies and the other studies are unlikely to have been due to methodological differences, because they used the same research method and data collection tool as the
EPUAP pilot prevalence study. There may be other reasons for the differences in the number of patients who received an appropriate level of care in these studies. Nonetheless, all the studies that have been reviewed in this section highlight the fact that more than a third of the patients do not receive an appropriate level of skin care.

The poor pressure ulcer related care that patients receive does not appear to be limited to the actual interventions that patients receive, but it is also evident in their pressure ulcer related documentation. In some of the aforementioned studies, the patient’s pressure ulcer related documentation was examined in order to ascertain if they had received the appropriate level of care to maintain their skin integrity (Vanderwee, Clark et al. 2007; Wann-Hanson, Hagell et al. 2008). This measure bolstered the rigour of these studies because the researchers were able to objectively verify the number of patients who had received care to maintain their skin integrity.

It is possible that interventions like regular repositioning were delivered by nurses but not documented, in which case it was presumed that this care had not been given (Vanderwee, Clark et al. 2007). This means that the number of patients who were said to not have received an adequate level of care to maintain their skin integrity might not be accurate. There is no evidence that the nurses in these studies delivered skin care to their patients which was not documented, so the assertion that patients may have received some skin care which was not documented is largely a moot point.

Maintaining accurate documentation is important for all aspects of patient care, but it is particularly important in pressure ulcer prevention. This is highlighted in guidelines for pressure ulcer prevention and management because accurate documentation helps to ensure that patients receive an appropriate level of care (RCN 2001; NICE 2001a; EPUAP 2005a). The code of conduct for nurses also states that all nurses are obliged to maintain accurate and up to date patient records (NMC 2008c). The evidence from pressure ulcer studies suggests that nurses are not delivering an appropriate level of care to prevent pressure ulcers and they are not keeping the pressure ulcer related documentation of their patients up to date. The majority of these studies have been undertaken in continental Europe, so the extent to which they apply to UK is open to debate. If the findings of these
studies are applicable to the UK, it would imply that nurses are contravening the terms of their code of conduct.

The studies that have been reviewed in this section provide some evidence of the extent of persistent, poor pressure ulcer related nursing practices. While the majority of studies that have been reviewed are not British, they represent the best available evidence on nurses pressure ulcer related practices. These studies report that a large number of patients who are at risk of developing pressure ulcers are not receiving an appropriate level of skin care. This suggests that that there is a gap between theory and practice as the guidelines on pressure ulcer prevention do not appear to be adhered to by nurses in clinical practice. Now that the paucity of nurses’ pressure ulcer related practice has been established, the gap between pressure ulcer prevention theory and practice will be now be explored.

1.3.1 Pressure ulcer prevention theory and practice

The evidence that has been reviewed thus far shows that cost of treating pressure ulcers is increasing and the number of people with pressure ulcers is not changing despite the publication of guidelines on pressure ulcer prevention and investment in education and equipment to prevent pressure ulcers. The fact that there are many hospitalised patients who are still not receiving an appropriate level of skin care suggests that there may be a theory-practice divide when it comes to pressure ulcer prevention.

Most of the guidelines on pressure ulcers are underpinned by expert opinion, qualitative studies or studies in the lower and middle tiers of the hierarchy of evidence, which makes it difficult to have the same level of confidence in their efficacy in comparison to other aspects of healthcare. This must not be taken to mean that the majority of measures that are recommended for pressure ulcer prevention are ineffective. It just means that they are not supported by the same level of robust evidence on benefit/harm like other aspects of healthcare, like cardiovascular disease.

It is also important to acknowledge that it is not clear how many pressure ulcers can be prevented, even though the efficacy of some preventative measure is well established. It is possible that research on pressure ulcers will never have the same number of robust empirical studies as other aspects of healthcare. This is due to the fact that it would be
unethical to allow patients to develop pressure ulcers in order to test a hypothesis about the efficacy of a specific intervention in an empirical manner.

Perhaps, a different view of the ethics of pressure ulcer related research needs to be adopted. One view would be to accept that any research study that measures the efficacy of a specific intervention needs to include patients from the population for which that intervention is intended. This means that a study that examines some aspect of pressure ulcer prevention or management would include patients who are at high risk of developing pressure ulcers or patients who have pressure ulcers. The results of this type of study could then be compared against the prevailing gold standard interventions to prevent or manage pressure ulcers, which would overcome many of the ethical issues which affect pressure ulcer related research.

Even if this view of pressure ulcer related research was adopted, some ethical issues would remain especially with regards to patients who are unable to give their informed consent. This is important because some of the patients with pressure ulcers or who are at high risk of developing pressure ulcers are so sick that they are unable to give their informed consent to take part in any study. On the other hand, it could be argued that patients who are unable to give their informed consent must be included in this type of pressure ulcer related research as long as it is in their best interests and this research is closely monitored and supervised from an ethical perspective. This is because if these patients are consistently excluded because of their inability to give informed consent, then the chances of coming up with innovations which improve their outcomes are reduced.

Irrespective of the view that one adopts towards on the ethics of pressure ulcer research, what is clear is that if a specific intervention appears to be effective at preventing pressure ulcers; then it would be unethical to deprive other patients of this intervention in order to preserve the methodological rigour of a study. This makes it difficult for pressure ulcer prevention to have the same amount of empirically robust studies that exist in other aspects of healthcare like infection control. It also suggests that it is time for pressure ulcer related research that moves beyond the traditional research areas of aetiology, treatment, cost, risk assessment, prevalence and incidence.
This is not to say that pressure ulcer studies that explore the traditional research areas will not continue to make an important contribution to our understanding of pressure ulcer prevention. Further investment in studies that explore the traditional research areas of pressure ulcer prevention and management may increase the amount of evidence that is available. It is however open to question if any future studies into the traditional areas of pressure ulcer research will have a higher level of empirical or methodological rigour than any previous studies, because of the aforementioned ethical issues. What is clear is that the majority of studies on pressure ulcers have focused on these traditional research areas, but the pressure ulcer prevalence is seemingly static.

The integration of the findings of other types of pressure ulcer studies into education, systems and processes may also result in improvements in clinical practice and reductions in the number of people who develop pressure ulcers. However, this is an area that is already receiving a great deal of attention from nursing leaders, the NHS and the government. This is evident in documents like the Fundamentals of care (Welsh Government 2003), State of the Art Metrics for Nursing (Griffiths, Jones et al. 2008) and High Impact actions for Nursing (NHSIAl, RCM et al. 2009). The measures set out in these documents are based on systematic reviews of the best available evidence, which take into account the results of studies into education, systems and processes that relate to pressure ulcer prevention and other aspects of healthcare. It must be noted that not all of these documents apply to the delivery of healthcare in Wales.

In the last twenty years, an increasing number of studies have sought to ascertain why the care that patients receive to prevent and manage pressure ulcers in clinical practice is not consistent with best practice. These studies have been undertaken with the belief that if the reasons why patients are not receiving an appropriate standard of care to maintain their care in clinical practice are understood, then measures can be put in place to overcome these issues. Some of this research has focused on the impact that nurses’ attitude and behaviour can have on pressure ulcer prevention and management in clinical practice. Some of this research will now be examined more closely in the next section.
1.4 Attitude, behaviour and pressure ulcer prevention

A few studies have considered nurses’ attitudes and behaviour towards pressure ulcer prevention, but the researcher’s extensive literature studies identified three key studies.

The first was Maylor’s (1999) Welsh survey. This study examined the relationship between the knowledge and locus of control of the individual nurse and the prevalence of pressure ulcers in their ward (Maylor 1999). This study was seminal because it provided evidence of a correlation between a nurse’s attitude and beliefs and their patients’ pressure ulcer related outcomes. The main original contribution of this study was the identification of a strong negative correlation between the health related beliefs of the ward manager and the prevalence of pressure ulcers on patients in their ward. This study reported that that the more that a Ward Manager believed that they could prevent pressure ulcers the higher the prevalence of pressure ulcers on their ward (Maylor 1999). This result may appear to be counterintuitive because it is not in line with received wisdom, but it is actually correct.

There are a number of potential explanations for this counterintuitive relationship between the beliefs of ward managers and the prevalence of pressure ulcers on their wards. One explanation is that Ward Managers with strong convictions about pressure ulcer prevention exert themselves in a manner that diminishes the autonomous decision making of more junior nurses culminating in an increased prevalence of pressure ulcers (Maylor 1999).

There may be other plausible explanations for the counterintuitive results of this study, but a detailed exploration of the relative merits of each and every potential explanation is beyond the remit of this thesis.

This study also had a number of other unique features which show that its results are worth noting. The participants were aware that the researcher was undertaking a study on pressure ulcer prevalence, which could have motivated them to take measures to protect their patients’ skin that they would not otherwise have taken (Maylor 1999). Hence, the participants in this study were free to undertake additional interventions which could have potentially reduced the number of patients with pressure ulcers. This in turn increases the probability that there was a genuine negative correlation between the beliefs of Ward Managers and prevalence of pressure ulcers on their wards.
Each piece of research has its limitations and this study is no exception. This study included questions on value in order to overcome the shortcomings of previous research on nurses’ beliefs and attitudes towards pressure ulcer prevention (Maylor 1999). So, this study only briefly considered nurses’ values with regards to pressure ulcers in order to augment its methodological rigour. Nonetheless, the majority (483 or 93.6%) of 516 participants in this study answered the questions on the value and prioritisation of pressure ulcer prevention. The fact that a small number of participants in this study did not answer these questions appears to be of limited significance because there are a lot of other questions where a larger number of the participants did not state their opinion (Maylor 1999). So, perhaps the results about the value and prioritisation of pressure ulcer prevention are more valid than those pertaining to the other aspects of this study.

The extent to which the findings of this study can be applied to other settings is also limited by other factors. This study was undertaken in one NHS trust where the primary researcher worked with a relatively small sample size for a survey of around 500 participants (Maylor 1999; Moore 2004). The participants in this study were also asked to state what value they placed on pressure ulcer prevention, even though value is an ambiguous term (Green 1990; Hebel 1998). This means that the participants could have construed the term value in different ways, but there is no evidence that this is the case. Despite its limitations, this study was significant because it established that there was a link between nurses’ beliefs and attitudes and their patients’ pressure ulcer related outcomes. This study also highlighted the fact that the value that nurses place on pressure ulcer prevention was a topic that merited further investigation.

The second key study that was identified was a multisite Irish cross sectional survey study by Moore and Price (2004). A randomly selected sample of 300 nurses from a population of 1300 nurses who worked on the non-specialist wards of six urban teaching hospitals in Ireland were invited to take part in this study (Moore and Price 2004). Ultimately, only 121 (40.3%) of the 300 questionnaires that were sent out in this postal survey were returned (Moore and Price 2004). This is a decent response rate, but it is less than what the researchers in this study were hoping to get. Therefore, the results of this study must be interpreted with caution (Moore and Price 2004). The majority of 29 (24%) of the 121 returned questionnaires were from surgical nurses and the remainder came from nurses
working in other hospital settings (Moore and Price 2004). Thus, the extent to which the results of this study can be applied to nurses working in other hospital settings because of the relatively small number of participants (121) for a survey and the fact that most of them were surgical nurses.

Most of the nurses in this study expressed a positive attitude towards pressure ulcer prevention, but they were not asked about their values. This positive attitude is epitomised by the fact that 120 (99%) of 121 participants said that nurses should be involved in pressure ulcer prevention (Moore and Price 2004). However, this positive attitude towards pressure ulcer prevention was not reflected in the nurses’ pressure ulcer related practices. The examination of the pressure ulcer related documentation completed by the participants in this study revealed that revealed that the patients’ pressure ulcer related care plans were not updated regularly (Moore and Price 2004). While 85 (70%) of the 121 participants claimed to use a pressure ulcer grading scale in their practice, but only 26 of them were able to correctly identify the pressure ulcer grading scale that they used in their clinical area (Moore and Price 2004).

The fact that the participants did not know the pressure ulcer grading scale that they were supposed to be using does not mean that they did not give care to prevent pressure ulcers. However, it is further evidence that most of the participants in this study did not keep the pressure ulcer related care plans of their patients up to date. Keeping contemporaneous and update documentation is something that all nurses are expected to do for all aspect of patient care (NMC 2008c). Hence, the poor documentation suggests that there may be a discrepancy between attitude and behaviour towards pressure ulcer prevention.

This study also highlighted other aspects of nurses’ perceptions of pressure ulcer prevention. Sixty two (52%) of the 121 of the nurses in this study stated that pressure ulcer prevention was a low priority (Moore and Price 2004). In addition, thirty two (28%) of the 121 nurses said that they were more interested in other aspects of nursing than pressure ulcer prevention (Moore and Price 2004). This might explain why the participants expressed a positive attitude towards pressure ulcer prevention, which was not consistent with their delivery of skin care.
The paucity of the pressure ulcer related practices of the participants in this study adds credence to the idea that pressure ulcer prevention is a lower priority for nurses that other aspects of nursing. In fairness, the participants in this study point out that there are environmental factors such as a lack of staff and time pressures which prevent them from delivering an appropriate level of skin care (Moore and Price 2004). This suggests that a positive attitude towards pressure ulcer prevention may be insufficient to change clinical practice due to impediments like poor staffing levels (Moore and Price 2004). So, there may other reasons why the pressure ulcer related practices of nurses do not correspond to their attitudes.

This multisite Irish survey underscores the impact that nurses’ views towards pressure ulcer prevention may have on their practice. To this end, the key findings of Moore and Price’s (2004) study indicate that nurses’ may say that pressure ulcer prevention is important, but they do not deliver the commensurate level of care to their patients. This study also highlights the complex nature of the relationship between nurses’ attitudes towards pressure ulcer prevention and environmental factors in clinical practice (Moore and Price 2004). Despite its limitations, this study made an important contribution on what is known about the manner in nurses’ perceptions influence their pressure ulcer related practices.

Given that the participants in this study expressed a positive attitude towards pressure ulcer prevention, then it is likely that that they placed a high value on pressure ulcer prevention as values have been shown to influence attitudes. A person’s values influence their attitudes (Bernard 2002; Pakizeh 2005), but values and attitudes are not the same thing. So, it must also be acknowledged that the nurses in this study were asked about their attitudes and not their values. There is robust empirical evidence which shows that values influence attitudes and behaviour to such an extent that the person develops an observable behavioural pattern in line with their values (Hall 1997; Bernard 2002). Therefore, the discrepancy between attitude and actions that is highlighted by this study suggests that the understanding the value that nurses place on pressure ulcer prevention may shed new light on their delivery of skin care.

The third key study that was identified was a Swedish qualitative content analysis study by Athlin, Idvall et al. (2010). Qualitative content analysis is a research method that enables
the researcher to interpret meaning from the text of the data through a clearly specified process of data analysis, which ensures that any categories that are generated are directly derived from the data (Hsieh 2005).

The participants in this study indicated that they held pressure ulcers and their prevention in low esteem. The nurses said that it was not part of their role to undertake interventions to prevent pressure ulcers because the maintenance of skin integrity was largely a concern for the nursing auxiliaries (Athlin, Idvall et al. 2010). Nonetheless, the nurses maintained that they should retain the responsibility for pressure ulcer prevention because the nursing auxiliaries did not possess a sufficient level of education to assume full responsibility for this aspect of patient care (Athlin, Idvall et al. 2010). The participants in this study also stated that grade one pressure ulcers were not considered to be pressure ulcers and went unreported throughout the patient’s stay (Athlin, Idvall et al. 2010). The views expressed by the nurses in this study may explain why there may be inconsistencies between nurses’ pressure ulcer related attitudes and behaviours, especially when it comes to participating in interventions to prevent pressure ulcers.

This study raises a number of issues, so it is important to establish the significance of its findings. A large sample for a qualitative study of 30 participants (14 community and 16 hospital nurses) were recruited in this study, but they were all selected by the head nurse based on criteria supplied by the researchers (Athlin, Idvall et al. 2010). This means that the head nurses in the two hospitals and the community settings could have selected people who they thought would give a particular view about pressure ulcers and their prevention (Athlin, Idvall et al. 2010).

It may seem strange to suggest that the head nurses would have selected people who they thought would give a particular view as they were given recruitment criteria by the researcher. However, the only two criteria that the head nurses were given were that the participants must have more than five years’ experience and must have looked after a patient with a pressure ulcer in the six months before they were recruited (Athlin, Idvall et al. 2010). So, given these criteria there is a possibility that the head nurses in this study could have selected potential participants who they thought would give a particular view. There is no evidence that this is the case, but if the head nurses handpicked people to give a
particular view then the results of this study could be biased and may not reflect the views of all of the nurses who work in those settings.

This qualitative content analysis study has its strengths and limitations. The credibility of the findings of this study are bolstered by the fact that the data analysis was underpinned by researcher consensus (Athlin, Idvall et al. 2010). In addition, all the participants in this study all expressed similar sentiments on the topics that were covered even though they worked in different clinical environments (Athlin, Idvall et al. 2010). This study was undertaken in Sweden where nursing practice and nursing auxiliary responsibility may differ from other countries, which limits the extent to which its findings can be taking into consideration in other countries. On the other hand, some of the results of this study are very similar to those of studies in other countries with different research methods.

A number of findings of this study are validated by the results of studies that have been undertaken in other countries. This is typified by the fact that the view expressed by the nurses in this study that pressure ulcer prevention is less important than other aspects of nursing (Athlin, Idvall et al. 2010), is akin to the results of Maylor (1999) and Moore and Price’s (2004) studies. This augments the significance of this finding from this study because Maylor (1999) and Moore and Price’s (2004) studies used different research methods and recruited more participants from other European countries.

The researchers in this study claim that their finding that nurses place a low value on pressure on pressure ulcers prevention is the same as the result from Moore and Price’s (2004) Irish study (Athlin, Idvall et al. 2010). This is an assertion that is not supported by the evidence. The majority of the participants in Moore and Price’s (2004) study expressed a positive attitude towards pressure ulcer prevention, but said that pressure ulcer prevention was a low priority for them.

The positive attitude that these nurses expressed suggests that they placed a high value on pressure ulcer prevention, as values influence attitudes (Hall 1997). However, values are not the same thing as attitude. The positive attitude towards pressure ulcer prevention expressed by the nurses in Moore and Price’s (2004) study was not reflected in their pressure ulcer related practices. Hence, it is difficult to certain about the value that the nurses in Moore and Price’s (2004) study placed on pressure ulcer prevention. This indicates
that the findings of this study correspond with the results of other studies to varying extents, but on the whole its findings appear to be valid and worthy of consideration.

All of the studies that have been reviewed in this section report that nurses perceive pressure ulcer prevention as a lower priority than other aspects of nursing. This is despite the fact these studies used different research methods and were undertaken in different countries. The results of these studies also suggest that the value that nurses place on pressure ulcer prevention may influence their attitude and behaviour towards the maintenance of their patients’ skin integrity. Therefore, it is important to establish what is known about the value that people place on pressure ulcer prevention.

1.4.1 Values and pressure ulcer prevention

There are no studies that have directly examined the value that people place on pressure ulcer prevention, but a number of opinion papers have been published on this topic.

There is a view amongst some tissue viability researchers that pressure ulcer prevention like many aspects of tissue viability is undervalued by healthcare professionals and society at large. This is because the relative importance of pressure ulcer prevention does not appear to be adequately reflected in clinical practice or government policy (Fletcher 2005; Harding 2005; Stephen-Haynes 2005). The level of public interest in pressure ulcers is less than that of other medical conditions like cancer, which means that pressure ulcers have a low public profile (Cherry 2006). These views are largely based on expert opinion but they suggest that the value placed on pressure ulcer prevention by healthcare professionals like nurses merits investigation.

There are other reasons that have been put forward to explain why pressure ulcers appear to be undervalued. One view is that healthcare issues like pressure ulcer prevention are often underappreciated because they affect the vulnerable in society, people without any political authority or healthcare professionals without any influence (Barker 1996; Hennessy and Spurgeon 2000). This assertion is largely predicated on expert opinion of the process by which healthcare policy is formulated and it is supported by some more robust evidence. The view that a low value is placed on the care of vulnerable groups like the elderly is reflected in their colloquial and somewhat pejorative description as “Cinderella services” by those who view these vulnerable groups as non-productive (Barker 1996). This means that
there are people outside the field of tissue viability who feel that some aspects of healthcare like pressure ulcer prevention which are undervalued because of the type of patients that they affect.

Perhaps, the low value that has been placed on some aspects of healthcare like pressure ulcer prevention is due to the lack of a medical professional lead. Having a medical lead on a healthcare issue is important because some doctors have such a high level of political and professional influence that they directly or indirectly affect the government’s healthcare policy (Walt 1994). This suggests that the lack of a medical lead may be one reason why pressure ulcer prevention may be undervalued compared to other aspects of healthcare.

The importance of a medical lead appears to be reflected in the manner that the government has emphasised the important of infection control and pressure ulcer prevention. Infection control falls under the domain of the medical speciality of microbiology while pressure ulcer prevention falls under the largely nursing speciality of tissue viability (Butler 2008). Statistics about the number of patients with nosocomial infections are readily available, but it is difficult to obtain the same information about patients with pressure ulcers. This lends itself to the view that the fact that infection control falls under the medical speciality of microbiology has given it a direct medical influence unlike pressure ulcer prevention and is part of the reason why infection control has a higher public and political profile.

There are other explanations which may account for the differences in the profile of infection control and pressure ulcer prevention. One alternative explanation is that some infections like swine flu are immediately life threatening in comparison to some grades of pressure ulcers. Whatever the case may be, it is clear that infection control has a higher public and political profile that pressure ulcer prevention.

Infection control is an interesting parallel to pressure ulcer prevention in many respects. In the last twenty years the government has published a number of policies, guidelines and targets pertaining to both of these issues. These measures to prevent infections and pressure ulcers appear to have had a different impact on clinical practice. The number of patients with nosocomial infections appears to be falling, and the public’s awareness of infections like MRSA has never been higher. On the other hand, the number of patients with
pressure ulcers does not appear to have changed and there seems to be a lack of awareness about how to prevent pressure ulcers amongst the public.

There are no studies that have been undertaken which have solely focused on the value that is placed on pressure ulcer prevention by nurses. The research that has been undertaken thus far, has inferred the value that nurses place on pressure ulcer prevention from their attitude and behaviour towards the maintenance of skin integrity. Most of these studies suggest that nurses place a low value on pressure ulcer prevention and perceive it to be a lower priority than other aspects of nursing. The prevailing view amongst tissue viability researchers appears to be that pressure ulcer prevention is undervalued by healthcare professionals and the general public (Harding 2005; Cherry 2006; Butler 2008), but this view is supported by a small amount of robust evidence. This indicates that ascertaining the value that nurses place on pressure ulcer prevention may shed new light on the pressure ulcer related practices.

Ascertaining the value that nurses’ place on pressure ulcer prevention may also be useful for other reasons. There is a lot of robust empirical evidence which shows that a person’s values have a direct impact on their beliefs, attitudes and actions (Bernard 2002; Pakizeh 2005). Therefore, it is possible that nurses’ behaviour and attitude towards the maintenance of skin integrity may be underpinned by the value that they place on pressure ulcer prevention. Understanding nurses’ values may also help to shed light on why there are inconsistencies between nurses’ attitude and behaviour towards the maintenance of skin integrity.

If the value that nurses place on pressure ulcer prevention can be established, then it is possible that their pressure ulcer related attitude and behaviour can be changed through an appropriate educational programme. This is because research studies have shown that education can alter a person’s values, behaviour and personality as it facilitates critical self-evaluation (Green 1990; Hall 1997; Seedhouse 2005). Therefore, if the value that nurses place on pressure ulcer prevention can be determined; then an educational programme can be created which may result in the delivery of care that is consistent with best practice and a reduction in the number of people with pressure ulcers.
Having established that the value that nurses place on pressure ulcer prevention is a topic that merits further investigation, it is now time to consider what is known about the relationship between nurses’ values and actions.

1.4.2 Nurses’ values and actions

The quality of evidence that is available about the impact that nurses’ values have on their actions varies tremendously. Many of the professional and organisational values of nurses are implicit in the codes of conduct for nurses, and there is a lot of evidence about the impact of these values on nursing practice (Pearcey 2004; Crumbie 2005). Conversely, the personal values of nurses have been subjected to relatively little theoretical or scientific scrutiny (Pearcey 2004; Crumbie 2005). This was evident in the literature search, because most of the evidence that was available on nurses’ values focused on their professional and organisational values.

Most of the studies that have been undertaken on nurses’ values have focused on the impact that their professional values have on their practice. This is typified by Pearcey’s (2004) three grounded theory studies which gathered data from 12, 15 and 25 participants respectively through interviews and questionnaires. These studies reported that the professional and organisational values that nurses were expected to uphold often subjugated their personal values, which had a negative impact on student attrition and nurse retention (Pearcey 2004). A great deal of detail was given by the participants in these studies about the professional values that they were expected to uphold like meeting targets, but the same level of detail was not given about their personal values (Pearcey 2004). So, most of the findings of these studies centre on the impact that nurses professional values have on their practice and motivation to stay in a given job and very little is said about the impact of their personal values on their practice. The lack of knowledge about nurses’ personal values is also highlighted in literature reviews by other value researchers like Crumbie (2005).

The evidence from values studies in other fields like psychology shows that a person’s values are a powerful influence on their actions. These studies have provided robust empirical evidence which shows that values can influence a person to such an extent that the person develops an observable behavioural pattern that is consistent with their values
(Hall 1997; Bernard 2002). This research has also shown that identifying a person’s values is a good way of understanding their behaviour, attitude and actions (Bourne 2002; Pekki-Erikkila 2003; Pakizeh 2005). Most of these value studies are surveys that have a high level of methodological rigour. These value studies have focused on eliciting the world values of the participants rather than the value placed on a specific thing. Nonetheless, their findings support the results of the small number of studies which have examined nurses’ values as they provide methodologically robust evidence which shows that a person’s values influence their actions.

The evidence that has been reviewed in this section shows that there is very little research and literature on nurses’ personal values. The evidence that is available is not very methodologically robust and can only be generalized to other settings to a limited extent. Despite this, the evidence that is available on nurses’ values appears to be consistent with more methodologically rigorous evidence from other value studies. The evidence from these robust value studies shows that a person’s values influence their behaviour, attitude and actions. Therefore, ascertaining the values that nurses’ place on pressure ulcer prevention may shed light on their attitude, behaviour and actions towards the maintenance of their patients’ skin integrity. Hence, the researcher felt that ascertaining the value that nurses place on pressure ulcer prevention might result in a better understanding of their pressure ulcer related practices. To this end, the research question for this study was: What value do nurses place on pressure ulcer prevention?

**Chapter summary and conclusion**

This literature review provides the basis for evaluating how the value that nurses place on pressure ulcer prevention influences their clinical practice in subsequent chapters.

This review of evidence also leads to a number of conclusions. Pressure ulcers have long been a topic of interest for healthcare professionals and the general public. This has resulted in a great deal of research into pressure ulcers. Preventing pressure ulcers is so important to nurses, that it is now recognised as a fundamental aspect of nursing. A number of guidelines on pressure ulcer prevention have been published and there has been a large investment into education and pressure relieving equipment in an attempt to reduce the number of people with pressure ulcers. However, the number of patients with pressure ulcers.
ulcers appears to be static and the costs of managing pressure ulcers are rising. The evidence from a number of studies also shows that many patients are not receiving an appropriate level of care to prevent and manage pressure ulcers when they are in hospital.

In a bid to understand why some patients do not receive an appropriate level of care, an increasing number of researchers have begun to examine nurses’ attitudes and behaviour towards pressure ulcer prevention. These studies report that the attitudes and behaviour of nurses towards pressure ulcer prevention may influence the care that patients receive. These studies have largely inferred the value that nurses place on pressure ulcer prevention from their accounts about their behaviour and attitudes towards the maintenance of skin integrity. This means that there are no studies that have solely focused on the value that nurses’ place on pressure ulcer prevention.

Research on nurses’ values has mainly focused on their professional values rather than their personal values, but it suggests that a nurse’s values influence their actions. This is consistent with the robust empirical evidence from value studies in other fields which shows that a person’s values influence their attitude and behaviour. The evidence from values studies also suggests that eliciting the value that nurses place on pressure ulcer prevention is a viable way of understanding their pressure ulcer related attitudes, behaviour and actions. Given that education has been shown to change a person’s values, eliciting the value that nurses place on pressure ulcer prevention could result in the creation of an educational programme that would result in the delivery of care in clinical practice that is consistent with best practice. This in turn could result in a reduction in the number of people with pressure ulcers. The prospect of influencing care in clinical practice inspired the researcher to undertake this study with the objective of ascertaining the value that nurses place on pressure ulcer prevention.

Having established why this aspect of pressure ulcer prevention merited further investigation, the next chapter will show how the research method for this study was selected and data collection undertaken.
Chapter 2: Methodology

Introduction

With the research question for this study having been determined, the researcher set about selecting a research method for this study.

The selection of the most appropriate research method is an integral part of any form of scientific inquiry. One key consideration is to ensure that the research method that is selected answers the research question (Clark 2003; Richards and Morse 2007). The cardinal principles of the method of inquiry that is selected such as its epistemologic outlook must bear credence in order to avoid the unwitting propagation of biased or flawed research (Brink and Wood 2001a; Carter and Little 2007). This indicates that the selection of a research method for any study must be undertaken in a rigorous and methodical manner. Therefore, all the available research methods were critically evaluated for their suitability for use in this study.

The first section of this chapter sets out the process by which the research method for this study was selected. This section will specify the considerations that were taken into account in this process, the research methods that were considered and why a particular research method was selected. The research method that was selected will then be critically analysed to show why it was ideal for use in this study. The remaining sections of this chapter will show how the data were collected and analysed in line with the tenets of the chosen research method.

2.1 Choosing a research method

There are many considerations to take into account when selecting a research method. Many researchers opt to use a research method that fits in with their world views when undertaking a research study (Cohen 2002). This approach may be suitable for many types of research, but it has a profound impact on research into people’s values. The world view that is adopted in a value study is important because it determines the types of values and values systems that can be measured (Pekki-Erikkila 2003; Pearcey 2004). This is an assertion that is based on comprehensive reviews of value studies, which are predominantly surveys. Most of the values studies that were included in these reviews focused on the
participants’ world values rather than the value that they placed on a specific thing. Nonetheless, the evidence from these studies indicates that an awareness of the researcher’s world view is important because of the impact that it can have on the research method that is used and the values that are measured.

There is also an alternative take on the impact that world views have on values research. This view is that the research method that the researcher opts to use in a values study partially reflects some of the researcher’s own values, irrespective of the specific research method that is used (Crumbie 2005). This view is primarily based on expert opinion and is supported by very little research evidence in comparison to the alternate view. Given the differing opinions on the impact of world views on a value study, the researcher was inspired to reflect on his world views and their potential impact on this study prior to selecting a research method.

After a period of reflection, the researcher decided to try and select the best research method to answer the research question whilst being aware of his own world views. Selecting the research method that is best suited to answering the research method is a sensible approach because each research method achieves its own unique set of goals (Cohen 2002). This is an assertion that is predicated on a critical appraisal of research methods and their relative merits. It is difficult to say whether or not the research method that was selected in this study reflects the researcher’s own values. This is due to the fact that it is difficult to objectively evaluate your own values because some of them are subconsciously held (Hebel 1998; Goodwin 2001; Bernard 2002). Hence, it is probable that the research method that was selected in some way reflects the researcher’s own values.

A number of other factors were considered before the evaluation of research methods began. The concept of value was revisited in order to determine which intellectual stance would be the most appropriate to adopt. This was because value is an ambiguous term relating to a human construct and there is no universally accepted method of measuring values or how value relates to other psychological constructs (Baker 1999; Bourne 2002; Pakizeh 2005). Determining the most appropriate intellectual stance was also important because values are very sensitive to the paradigm that they are examined in (Goodwin 2001; Pekki-Erikkila 2003). The use of any given research paradigm seems to influence the
type of values that can be examined in a study (Pearcey 2004; Crumbie 2005). So, the concept of value and the impact of research paradigm on values were examined prior to the selection of the research method.

The research paradigm is perceived to affect the values that can be ascertained in two main ways. If values are viewed as being definable then they can be studied in isolation unencumbered by contextual issues and a hierarchical list of values can be used to ascertain a person’s values and their concomitant hierarchy of values (Pekki-Erikkila 2003; Crumbie 2005). Conversely, a postmodernist take on values is incompatible with the use of a hierarchical list of values because it requires a focus on the links that exist between the person and the things that is valued or the value itself (Pekki-Erikkila 2003; Crumbie 2005).

Most research studies that have examined value at the ideological, national, work and individual level have used hierarchical lists of values, but there are hardly any empirical studies on personal values (Goodwin 2001; Pekki-Erikkila 2003). The lack of empirical studies on personal values might be due to the fact that personal values are only evident in a person’s work and life experience and not in a predetermined list of values (Pekki-Erikkila 2003). This suggests that the disparity in the amount and calibre of evidence pertaining to personal values in comparison to other types of values is due to research paradigm that has been used in most value studies.

There are differing levels of evidence that underpin research on different types of values, but there seem to be two main approaches that can be taken when undertaking value research. Values can either be studied from an objectivist stance which entails the control and suppression of the expression of values or a post-modernist perspective that allows for engagement and the expression of the values of the participant, researcher and society (Hall 1997; Bourne 2002; Crumbie 2005). The use of a predetermined list of values in this study would have been inappropriate because the value placed on pressure ulcer prevention is a personal value, which is different from the other types of values that people have. Pressure ulcer prevention also incorporates so many other aspects of nursing that it would have been inappropriate to compare it to another nursing intervention in a hierarchical list of values like honesty and happiness in an objectivist value study.
The researcher adopted the post-modern stance on values because it allows people to express their personal values freely and it highlights the contextual factors which affect their values. These two qualities of the post-modernist approach to value made it ideal for this study as its objective was to ascertain the value that nurses place on pressure ulcer prevention, which is a personal value.

2.1.1 Research methods evaluated

A number of quantitative research methods were considered for use in this study. This included traditional quantitative methods of ascertaining people’s values like ranking, rating or rating and ranking. Other quantitative research methods like Discrete Choice Experiments and the Delphi approach were also considered for use in this study because they have been successfully utilised in other fields to ascertain the relative importance that people place on different things (Mead and Moseley 2001; Mazzanti 2003; Gerard and Lattimer 2005). So, every conceivable quantitative research method was considered for use in this study.

Each individual quantitative research method was appraised for its suitability to obtain data which would answer the research question. Ultimately, quantitative research methods were deemed to be inappropriate for this study. Quantitative research methods were deselected because they are primarily designed to test a theory (Bottorff 1997; Creswell 2003). Quantitative research methods are also used to answer questions such as the research question in this study, but their use would have been inappropriate in this instance. This is because the objective of this study which was to generate a theory on the value that nurses place on pressure ulcer prevention and not to test a theory. The use of a quantitative research approach was also rejected because it would have required the adoption of an objectivist stance, which was incompatible with ascertaining a personal value like the value that nurses place on pressure ulcer prevention.

Qualitative research methods were then evaluated for their suitability for this research study. This evaluation considered their properties with particular emphasis on their suitability for ascertaining personal values. Qualitative research methods are used to provide a detailed and complex understanding of a topic that has not been investigated before (Creswell 2007; Richards and Morse 2007). This suggested that qualitative research methods were ideal for this study because it was exploring a topic that had not been
previously investigated. The use of qualitative research methods also creates theories that take into account complex, contextual factors that explain the actions that people take as well as the motivation that underpins these actions (Patton 2002; Creswell 2007). The ability of qualitative research methods to take into account complex and contextual factors meant that they were better suited for this study compared to quantitative research methods because these factors affect a person’s values and value systems (Goodwin 2001; Pekki-Erikkila 2003).

The majority of quantitative value studies have a high level of methodological rigour, but they have largely focused on people’s world values and not their personal values. Despite this, the few qualitative value studies which have been undertaken have provided a number of valuable insights into the nature of the relationship between people’s values and context. As a result, qualitative research methods are perceived to be the best way of ascertaining personal values by a number of value researchers like Goodwin (2001), Pekki-Erikkila (2003) and Crumbie (2005). This suggested that a qualitative research method would be ideal for this study because the value that a nurse place on pressure ulcer prevention is a personal value.

The examination of qualitative research methods also indicated that they are uniquely suited for studies on nursing values. A small number of value studies in nursing have used a qualitative approach, but these studies have highlighted some of the values that lie within nursing practice (Goodwin 2001; Crumbie 2005). The results of these studies also indicate that qualitative research methods provide greater scope for data based definitions of nursing values compared to quantitative research methods which test predetermined lists of values (Crumbie 2005). In other words, qualitative research methods give the participants greater scope to state what different things mean to them in their own words; unlike quantitative research methods where they are asked to state the relative importance of a list of things that have been determined by the researcher.

There are relatively few value studies that have been undertaken in nursing compared to other fields like psychology. Nonetheless, the evidence from the studies that have been undertaken suggests that qualitative research methods may be the best way of exploring nurses’ values. This is because the delivery of nursing care to patients is often complex and
is susceptible to a number of different contextual factors (Crumbie 2005). In addition, the value laden decisions that nurses are often compelled to make in clinical practice often have a direct impact on patient outcomes (Tschudin 1992; Koerner 1993). Thus, a qualitative research method was deemed to be the best way of ascertaining the value that nurses place on pressure ulcer prevention.

Qualitative research methods also seemed to be ideal for this study for other reasons. The researcher adopted a post-modernist stance on values in this study, which is most consistent with a qualitative research approach. The qualitative research approach is the best way of eliciting values if one adopts a post-modernist stance on values because it reflects the dynamic and contextual complexity of values (Johnson 1983; Crumbie 2005). This is a point that is supported by the evidence from the small number of qualitative value studies that are available. The evidence from these studies suggested that the adoption of a post-modern view of values and the use of a qualitative approach was ideal for this study because nurses work in a dynamic and incessantly evolving environment.

Having discerned that qualitative research methods were the most consistent with the post-modernist stance on values that had been adopted, a concerted effort was made to evaluate all the available qualitative research methods with an open mind. Qualitative research methods exist in the same paradigm but they differ in their objectives, methodology and application (Cohen 2002; Creswell 2003). There are many qualitative research methods, but the three main qualitative research methods that are the most popular are ethnography, phenomenology and grounded theory (Higginbottom 2004; Richards and Morse 2007). Nonetheless, all the available qualitative research methods were closely examined for their suitability for use in this study.

**Ethnography, phenomenology and grounded theory**

Each of the three main qualitative research methods has its own unique intellectual underpinning and key objectives. Ethnography is a research method that entails the immersion of the researcher in the phenomenon under investigation resulting in a single interpretation of the phenomenon under investigation (Ausband 2006; Creswell 2007). Phenomenology is employed to ascertain meaning and focuses on establishing the lived experience of the participants, which is usually based on an in depth exploration of the topic
Grounded theory formulates theory inductively from the systematic and replicable analysis of data (Glaser and Strauss 1967; Duffy, Ferguson et al. 2003).

The central objective of ethnography is to understand a phenomenon from the cultural perspective of the participant through immersion in that society by the researcher (Maggs-Rapport 2000; Cohen 2002; Richards and Morse 2007). The emphasis on lived experience in phenomenology makes it ideal for researching many nursing phenomena as it takes into account a wide range of contextual and personal factors (McNamara 2005; Richards and Morse 2007; Starks and Trinidad 2007). Grounded theory has an inherently inductive epistemic philosophy, but abductive and deductive principles may be used in the formulation of a theory as long any insights that arise from these two principles are supported by the data (Backman and Kyngas 1999; Cohen 2002). The use of different principles in the analysis of data in grounded theory facilitates the identification of the appropriate themes in the data, which ensures that the theory is generated is grounded in the data (Cohen 2002; Starks and Trinidad 2007).

Each of the three main qualitative research methods were evaluated for their suitability for use in this study, but only one research method was selected. Ethnography was not selected for use in this study because it relies on the researcher becoming immersed in the world of participants, which was incompatible with aim of this study to recruit as diverse a range of participants as possible. Phenomenology has many good qualities, but ultimately grounded theory was selected for use in this study because it provided the clearest framework for collecting and analysing data in order to generate a robust data based theory which answered the research question.

Each qualitative research method has its own way of generating a robust data based theory, but the framework for theory generation in grounded theory was deemed to be the best suited to this study because it is systematic and replicable. The fact that grounded theory has a systematic and replicable framework for data collection and analysis was of prime importance because this study was undertaken by a researcher who was learning the intricacies of the research process. A clear framework for the systematic and replicable
generation of a theory was also important because this study examined a topic that had not been previously subjected to any scientific scrutiny.

Now that the rationale for the selection of grounded theory has been stated, the next section will set out the version of grounded theory that was used in this study and why it was selected.

### 2.2 Selecting a version of grounded theory

There are two main versions of grounded theory. Grounded theory was first described by Glaser and Strauss (1967), but they subsequently disagreed on the manner in which it should be undertaken. The original version of grounded theory came to be known as Glaserian grounded theory, while the version of grounded theory advocated by Strauss and Corbin in known as Straussian grounded theory (Kendall 1999; Boychuck-Duchscher and Morgan 2004). Each of these versions of grounded theory has its own unique framework for the generation of a data based theory, so each version was appraised for it suitability for use in this study.

This appraisal identified a number of differences between Glaserian and Straussian grounded theory, but a detailed examination of each of these differences is beyond the remit of this thesis. (The differences between Glaserian and Straussian grounded theory are shown in appendix 2 on page 238). Straussian grounded theory is such a radical departure from Glaserian grounded theory that some argue it constitutes an entirely different research method (Eaves 2001; Richards and Morse 2007). Glaserian and Straussian grounded theory are so different that some claim it is better to select the version of grounded theory that is best suited to the research objective when undertaking a study, rather than trying to reconcile these two research approaches (Cutcliffe 2000a; Denscombe 2003). Consequently, these and other versions of grounded theory were evaluated for their suitability for this study.

**Other versions of grounded theory**

The evaluation of different types of grounded theory considered properties of each research method and how they met the objectives of this study. One of the fundamental differences between Straussian and Glaserian grounded theory is that Straussian grounded theory
applies a conditional matrix to data analysis (Glaser 2001; Corbin and Strauss 2008). Despite this, Glaserian and Straussian grounded theory have their critics. Glaserian grounded theory has been criticised for being positivistic (Clarke 2005; Charmaz 2006). Straussian and Glaserian grounded theory have both been criticised for their assumptions about objectivity and their perceived abandonment of complex, contextual and variational factors (Clarke 2003; Kushner and Morrow 2003; Llewellyn 2005). These criticisms have also been tempered with recommendations on how to improve grounded theory.

Critics of Glaserian and Straussian grounded theory advocate greater transactionalism and constructivism in grounded theory that permits the values of the researcher to influence the research because they view reflexivity and inclusivity as being better suited for good research than objectivism (Charmaz 1994a; Mathbor 2002; Glaser 2005). The perceived shortcomings of Glaserian and Straussian grounded theory have resulted in a number of modifications to the data analysis, interpretation, reflexivity and the relationship between researcher and participants in grounded theory (Cutcliffe 2000a; Hall and Callery 2001; Llewellyn 2005). Modified versions of grounded theory have been put forward by researchers like Kools, McCarthy et al (1996), Eaves (2001) and Clarke (2003) and Charmaz (2006) each with their own characteristics which make them different versions of grounded theory.

Even though there are different versions of grounded theory, they all emphasise the same fundamental steps for theory generation (Hutchinson and Wilson 2001; McCann and Clark 2003a; Hallberg 2006). Therefore, the main differences between alternate versions of grounded theory centre on the ontology and epistemology that underpin each approach and the role of the researcher. Given the similarities and differences of the different versions of grounded theory the evaluation of each of these different research methods for use in this study centred on the ability to answer the research question.

The researcher felt that the conditional matrix inherent in Straussian grounded theory provided the best framework for the systematic and replicable generation of a robust theory. Straussian grounded theory was also selected because its ontology and epistemology were the most consistent with the objectives of this study. Straussian grounded theory has a unique ontological stance, which differentiates it from other forms of
grounded theory because it takes into account the impact of macro-social factors on social interactions (Strauss and Corbin 1998b; Boychuck-Duchscher and Morgan 2004). Taking into account these factors was important in this study because values are affected by the context, for example in an environment where risk avoidance is highly prized then values like autonomy and tolerance are abdicated in favour of conformity (Hall 1997; Pakizeh 2005). So, Straussian grounded theory was chosen as the research method because its properties and objectives were ideally suited for meeting the objectives of this study. Nonetheless, an awareness of the limitations of Straussian grounded theory was maintained throughout this study in order to generate the best possible theory.

Having established why Straussian grounded theory was chosen as the research method, it is now time to examine its philosophical underpinnings and tenets and how they influenced the manner in which this study was undertaken.

2.2.1 Ontology and epistemology

Straussian grounded theory has a unique ontological stance, which is distinct from other forms of grounded theory. In Straussian grounded theory the “truth” is something that is enacted and knowledge is intimately related to time and place (Strauss and Corbin 1990). This is sometimes taken to mean that Straussian grounded theory has a relativist ontology and views “reality” as something that is very specific and local (Annells 1996; Urquhart 2001). The adoption of a relativist ontology often results in a focus on perspective, which means that reality is viewed as consisting of multiple mental constructions each possessing an equal level of relevance (Andrews 2003). In other words, people who have subscribed to a relativist ontology often believe that there is no objective reality and think that there are many versions of reality each of which are equally relevant. This means that a relativist ontology can make it difficult to differentiate between the “reality” of the social and natural world, which means that there is no “truth” that can be ascertained in any meaningful way in the natural or social sciences (Annells 1996). This indicates that the relativist ontology of Straussian grounded theory is sometimes perceived to lead to the “truth” being construed as nothing more than that the contemporary consensus on a specific phenomenon at any given time.
The view that Straussian grounded theory has a relativist ontology which denies the existence of an objective reality, but instead views multiple versions of reality as being equally relevant is inaccurate. Straussian grounded theory conceptualises theory as a version of reality that cannot always be known, but can always be interpreted (Strauss and Corbin 1998b; Urquhart 2001). To put it simply, Straussian grounded theory construes theory as a version of reality that cannot always be confirmed objectively, but can always be interpreted. This may seem like a subtle semantic point, but saying that reality cannot always be objectively confirmed is not the same thing as denying the existence of an objective reality.

Instead, Straussian grounded theory creates constructed realities within a relativistic ontological stance (Annells 1997a; Schreiber 2001b). This unique ontological stance enables Straussian grounded theory to take into account the impact of macro-social factors on social interactions (Strauss and Corbin 1998b; Boychuck-Duchscher and Morgan 2004). This does not preclude relativism, but it means that Straussian grounded theory does not focus on the truth or reality of the social or natural world. Instead, Straussian grounded theory centres on the version of reality that can be interpreted. So, perhaps the most accurate description of Straussian grounded theory ontological stance is relativist; but within a constructivist paradigm.

The ontological stance of Straussian grounded theory also has implications for the manner in which theory is verified. The framework for the generation of a Straussian grounded theory is focused on the simultaneous discovery and verification of theory through the provision of a plan for action; that is coupled with guidance on when it can be practically applied (Strauss and Corbin 1998b; Schreiber 2001b; Walker and Myrick 2006). Straussian grounded theory eschews the traditional approaches to verification such as Popperian falsification or statistical probability (Strauss and Corbin 1990; McCann and Clark 2003b). So, the theory in this study was verified using the framework provided by Straussian grounded theory. The approach to verification in Straussian grounded theory is also unique in other ways. A Straussian grounded theory is verified through constant comparison as the study is...
undertaken and not through a subsequent study (Strauss and Corbin 1990; McCann and Clark 2003b). Thus, Straussian grounded theory constructs reality with a relativistic ontological stance, without producing results that are generalisable in the positivist or post-positivistic ontological view (Annells 1997a; Strauss and Corbin 1998b). The researcher shares Strauss and Corbin’s views on the nature of truth and reality within Straussian grounded theory. This should not be taken to mean that the researcher’s world view is entirely consistent with that of Strauss and Corbin. Nonetheless, the researcher concurs that a Straussian grounded theory is verified through constant comparison and produces results that cannot be extrapolated to a broader population as with a positivist or post-positivist study.

The epistemological stance of the Straussian approach to grounded theory is also unique. Straussian grounded theory has a subjectivist and transactional epistemological outlook (Strauss and Corbin 1990; Annells 1996). Subjectivity is viewed as enriching the research process in Straussian grounded theory because the theory is generated in a transactional process between the researcher and data (Strauss and Corbin 1998b; McCann and Clark 2003b). This means that this study has a relativist ontic thrust within a constructivist paradigm and adopts a subjectivist epistemic stance because it adheres to the tenets of Straussian grounded theory.

The philosophical underpinnings of Straussian grounded theory also influence the manner in which data are collected and analysed. Data can be gathered in a number of different ways in Straussian grounded theory as long as the method used provides rich, detailed data such as observation, interviews, audio/video recording or the examination of documentary evidence (Strauss and Corbin 1998b; Streubert and Carpenter 1999a). Irrespective of the specific data collection method that is used, data collection in Straussian grounded theory is always driven by theoretical sampling and constant comparison (Strauss and Corbin 1990; Denscombe 2003). These tenets of Straussian grounded theory were adhered to in this study and are explored in greater detail in subsequent sections of this chapter.

This section has established that Straussian grounded theory has a philosophical underpinning that is distinct from other grounded theory approaches. The unique world views at the heart of Straussian grounded theory also have implications for the objectives
and rigour of any study that adopts this approach. These will be explored in more detail in the next section.

2.2.2 Properties, tenets and objectives

The definition of a theory in Straussian grounded theory is different from that used in other types of grounded theory. A grounded theory was originally defined as a group of clearly defined propositions that are systematically linked with statements of relationship to form a theoretical framework that explains the phenomenon under investigation (Glaser and Strauss 1967). These propositions may be right or wrong. On the other hand, a Straussian grounded theory must fit the data, be sufficiently abstract to allow application to a variety of different settings, valid for the daily reality of the topic of interest and provide control by stating the situations in which the theory applies (Strauss and Corbin 1990; Cutcliffe 2005).

Some researchers like Charmaz (2006) argue that the Straussian definition of a grounded theory retains problematic positivistic elements of the original (Glaserian) version of grounded theory. Despite this, even Charmaz (2006) concedes that Straussian grounded theory has interpretivist elements and emphasises the conceptual links within the theory. This suggests that the criticism of the Straussian definition of a grounded theory for being too positivist may be unfair, because it overlooks it unique philosophical underpinnings. This study adopted Straussian definition of a grounded theory as it was the most consistent with the philosophical underpinnings of this research method.

The Straussian approach to grounded theory has its own properties and objectives, which make it ideal for certain types of studies. Straussian grounded theory is normally used to shed light on a new topic area, especially when confronted by a novel phenomenon or once a specific problem has been identified (Streubert and Carpenter 1999a; Denscombe 2003). The core objective of Straussian grounded theory is the induction of a conceptually dense grounded theory that is focused on the social processes that pertain to the topic of interest and is presented in a discursive format (Annells 1997a; Strauss and Corbin 1998a).

A Straussian grounded theory must also be applicable to the phenomenon’s management as a result of the insight that it provides for the practitioner, although it remains open to further research (Strauss and Corbin 1998a; Streubert and Carpenter 1999a; Denscombe 2003). These properties and objectives of Straussian grounded theory coincided with the
main objectives of this study to generate a robust theory about the value that nurses place on pressure ulcer prevention through a systematic and replicable process. As a result, the tenets and objectives of Straussian grounded theory were adopted after they had been critically evaluated for their relevance to this study.

The tenets of Straussian grounded theory also have other implications for the theory that is generated. The participants in a Straussian grounded theory study and others who are working in the topic area must be able to comprehend and make sense of the theory that is generated because it is a representation of their reality (Strauss and Corbin 1998b; Bakir and Bakir 2006). This is not the same thing as participant validation. In Straussian grounded theory, participant validation is not necessary because constant comparison ensure the representativeness of the concepts and categories generated (Corbin and Strauss 1990).

Participant validation is not recommended in grounded theory studies because the stories the participants recounted can acquire different meanings or significance over time resulting in the participants viewing their stories in a different manner (Andrews 2003). Participant validation is also plagued by difficulties in ascertaining when to start checking, the failure of participants to recall what they said, an unwillingness to contradict the researcher by the participants and a lack of clarity about the level of verification that is acceptable (Cutcliffe and McKenna 1999; Andrews 2003). The use of participant validation was also inappropriate for this study because it used an unobtrusive measure to elicit the value that the participants placed on pressure ulcer prevention. The participants in this study were unaware that the researcher was eliciting their values when they took part in this study. This was not to deceive the participants, but an unobtrusive measure was used in order to overcome the ambiguity associated with the term value. The objective of this study was to generate a theory that nurses could comprehend, but this theory was not validated intentionally by the participants in this study.

The use of an unobtrusive measure and the lack of participant validation did not preclude the researcher from generating a theory that could be understood by nurses working in similar circumstances to the participants. The results of this study were presented to similar groups of nurses at EPUAP and Tissue Viability Society conferences. The majority of those present at these conferences (especially the practising nurses) stated that they understood
the grounded theory from this study and felt that it was representation of their reality in clinical practice. This was despite the fact that these nurses came from different countries, with different healthcare systems. Hence, the theory that emerged from this study fulfilled one of the key tenets of Straussian grounded theory in an unconventional manner.

There are other objectives of Straussian grounded theory which influenced the manner in which this study was undertaken. A Straussian grounded study aims to generate a verified robust theory (Strauss and Corbin 1990; 1998b). This objective is often misconstrued because it does not refer to the traditional objective of establishing a truth value, but instead refers to the search for data that either verify or disprove the relationships in the emergent theory (Dey 1999; Schreiber 2001b). Verification in Straussian grounded theory is not a search for proof, but it entails looking for support for the stated conceptual links in the data (McCann and Clark 2003b; Walker and Myrick 2006). Verification is an incessant process throughout the tenure of a Straussian grounded theory study and is not solely reliant on subsequent quantitative research (Strauss and Corbin 1990; Schreiber 2001b). Verification of this Straussian grounded theory was provided by constant comparison throughout the duration of this study.

There are other elements of Straussian grounded theory that have been criticised or cited as limitations and the measures that were taken to address these issues will be set out when the rigour of this study is examined in the last chapter. Having explored the key tenets of the research method for this study it is now time to consider the manner which this study met the regulations pertaining to research governance and was designed to gather data.

2.3 Research design

The researcher completed the relevant forms from the Trust, University and National Research Ethics Service (NRES) and submitted them with a research protocol to obtain permission to undertake this study. The research protocol that was submitted was based on the universally acknowledged ethical principles (see table 2.1 overleaf) (Noble-Adams 1999a; Morse and Richards 2002; Giordano, O'Reilly et al. 2007).
Table 2.1 Ethical principles underpinning research protocol
Adapted from Noble-Adams (1999a; 1999b), Morse and Richards (2002) and Giordano, O’Reilly et al. (2007).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Right to self determination</td>
<td></td>
</tr>
<tr>
<td>2. Beneficence</td>
<td></td>
</tr>
<tr>
<td>3. Freedom from harm</td>
<td></td>
</tr>
<tr>
<td>4. Right to privacy, anonymity and confidentiality</td>
<td></td>
</tr>
</tbody>
</table>

The only change to the research protocol that was made to gain approval to undertake the study was the insertion of a two week interval between showing participants the EPUAP Pressure Ulcer Classification Scale (PUCLAS) (see appendix 3 on page 243) and undertaking the interview. This amendment was at the behest of the Trust’s research governance authorities who felt that seeing the pictures of pressure ulcers in the EPUAP PUCLAS could cause such psychological trauma to the participants that it could bias the findings of the study. This increased the interval between receiving a participant’s written consent to an interview to undertaking the actual interview to one month.

This study had the relevant indemnity cover and adhered to the NRES advice at the time the study was undertaken (see letters of approval in appendices 4 and 5 on pages 247 and 248 respectively). This study was also overseen by data protection officers from the Hospital Trust and the University from where the participants were recruited (see appendices 6, 7 and 8 on pages 251, 252 and 254 respectively).

2.3.1 Gaining informed consent
Once permission to undertake the study had been granted, the researcher held meetings with the senior nurse managers for all the non-acute medical wards in the targeted hospitals in order to publicise the study and to garner their cooperation and support. This was important because the senior nurse managers help was required to ensure that all the nurses who volunteered to participate in the study were given time from their clinical duties.
to take part in the study. There was a mixed response to the study with some senior nurse managers being more enthusiastic than others.

The senior nurse managers who were enthusiastic about this study invited the researcher to publicise the study in the meetings that they held with their ward managers. As a result of these meetings the researcher was able to visit the nurses who worked on the wards that fell under the remit of these senior nurses to explain the study in more detail and to leave information sheets and consent forms on the wards. Senior nurse managers in 11 out of the 14 hospitals in the target population declined to allow the researcher to approach their staff about taking part in this study. The senior nurses maintained that this was due to the fact that their wards were undergoing a great deal of restructuring, and it would not be possible to facilitate this study at that time. In these cases, the researcher was not able to get permission to speak to the ward managers or visit the wards and hence was unable to recruit any participants from these wards.

Support from the senior nurse managers was also important to this study because the senior nurses had a key role in ensuring that the participants were given time from their duties to be interviewed. The senior nurse managers also provided the researcher with a room in the hospital that was far away from the ward, so that the researcher could undertake the interview without any interruptions. So, when a senior nurse manager refused the researcher permission to approach their staff about taking part in this study; the study could not be undertaken in that setting even though permission had been obtained from the Trust that ran these hospitals.

This did not preclude the researcher from directly approaching the nurses and interviewing them in their own time. This would have been challenging because research governance approval for this study was obtained on the proviso that the nurses would not be interviewed on their own time and that interviews would be undertaken on Trust premises. This study was undertaken at a time when the Trust was restructuring its wards and a lot of nurses were either being reassigned to different ward or re-interviewed for their posts. Therefore, the researcher would have had no way of knowing which nurses worked on each ward and would have been unable to visit the wards, given the fact the permission to visit the wards had been denied.
So, the researcher felt that it would be inappropriate to attempt to approach nurses directly and ask them to take part in this study in their time. This meant that it was not possible to achieve the objective of recruiting participants from 14 different hospitals out of a theoretical target population of 300 nurses. It must be noted that these challenges in recruiting participants only affected the first stage of data collection where the participants were recruited from two hospitals. In the second stage of data collection, participants were recruited from the twelve hospitals that had not taken part in the first stage of data collection.

After the researcher had visited a ward, all the nurses who worked there were given an information sheet explaining fully the aims and objectives of the study. The potential participants were also given a consent form that they were asked to complete and send to the researcher, if they were interested in participating in the study. (The information sheet and consent form can be reviewed in appendices 9 and 10 on pages 256 and 264 respectively.) Once the researcher received a signed consent form, the potential participant was contacted and a pre-interview visit arranged.

Similar arrangements were made for the recruitment of students to this study. The researcher held meetings with the pre-registration department of the university to publicise the study and gain their support. As the researcher was only interested in speaking to students who had worked on the aforementioned wards, it was not possible to speak to all the students in person as this would have meant the university breaching data protection regulations. Therefore, the researcher gave the information sheets and consent forms to staff working the pre-registration department of the university who forwarded them to students who fell into the target population. Once the researcher received a signed consent form, the potential participant was contacted and a pre-interview visit arranged. The pre-interview visit also afforded the researcher the opportunity to explain the interview procedure and finalise the arrangements for the actual interview two weeks later.

All the potential participants in this study were issued with an information sheet that set out the aims and objectives of the study accompanied by a consent form in order to ensure that they were able to give their informed consent to participate in this study (see appendices 9 and 10 on page 256 and 264 respectively). The potential participants were given two weeks
to think about participating in the study. Once the participants had consented to participating in the study and had a pre-interview visit by the researcher, they were given an additional two week cooling off period before being interviewed.

Now that the manner in which informed consent was obtained, it is now appropriate to examine the plan for interviewing the participants in this study.

2.3.2 Interview design

The plan for interviewing the participants in this study was designed to ensure that the participants were provided with an atmosphere in which they felt comfortable and could freely relate their experiences. The location for the interviews was also specially chosen to be a setting that the participants were comfortable with, but still maintained their confidentiality and was free from any disruptions. The nurse interviews were undertaken during working hours in a room in the hospitals that they worked in that was distant from their ward. The students were interviewed at their university during a self-directed study period on a day that they were receiving training in the university, in a room distant from the lecture theatres.

The individual interviews were semi-structured and explored the participants’ experiences and values relating to pressure ulcer prevention in detail. (The initial stem questions that the participants were asked are given in appendix 11 on page 265). All the interviews were conducted in a private setting and audio taped with the participant’s consent. The interviews were initially envisaged to last for 60 and 90 minutes or until the participants decided to end the interviews. In order to minimise disruption, arrangements were made to ensure that participants had been given time off to participate in the interviews. The amount of time off and the venue for the interviews were negotiated with and approved by the hospital managers, the participants and their ward managers/tutors to minimise any disruptions to patients and the participants’ wards.

The study aimed to recruit only one person from a particular ward and aimed to recruit participants from all of the 14 hospitals in the different geographical locations in order to further mitigate the resource impact of the interviews on the patients and wards. In the first stage of data collection the researcher was only able to recruit participants from two
hospitals, but in the second stage of data collection, participants were recruited from the other 12 hospital sites.

The researcher wanted to recruit participants from as many different geographical locations in order to identify if their values varied in line with the hospital that they worked in. The venue, time and location for the student interviews was negotiated with and approved by the university and the participants to ensure that it did not interfere with their studies or impinge on their training. This study set out to recruit students from different training cohorts to ensure that the study had as diverse a range of participants as possible. This was also to enable the researcher to ascertain if the students’ values changed as they progressed through their nurse training.

The researcher’s objective to recruit as many participants from different settings as possible was primarily underpinned by a desire to collect as many diverse opinions as possible, but was also in line with the tenets of Straussian grounded theory. A Straussian grounded theory study can start with some form of selective or purposive sampling because of the lack of an emergent theory to guide data collection (McCann and Clark 2003a; Morse 2007). Once the initial data analysis in a Straussian grounded theory is completed, theoretical sampling comes into greater play and the sample that is subsequently selected is influenced by the provisional hypotheses (Backman and Kyngas 1999; Cutcliffe 2000a). The plan for individual interviews fulfilled the tenets of grounded theory and simultaneously enabled this study to obtain as diverse a range of views as possible before theoretical sampling was used to guide data collection.

Once the potential participants had returned signed and dated consent forms to the researcher, they were visited by the researcher and issued with the EPUAP PUCLAS. The researcher had a brief dialogue with each potential participant to ensure that they familiarised themselves with the EPUAP PUCLAS. The EPUAP PUCLAS enabled the researcher to verify that the potential participants had indeed seen pressure ulcers, thus making them eligible to participate in the study. This was important because pressure ulcers are often confused with other types of wounds. The use of the EPUAP PUCLAS also ensured that all the participants could describe the pressure ulcers that they had seen using the same terms.
Now that the plan for interviews has been set out, it is time to set out the potential participants who were targeted for this study.

2.3.3 Plan for recruiting participants

The population that was targeted for this study were the 300 nurses who worked in the non-acute adult medical wards in 14 Welsh hospitals. These 14 different hospitals were located in different geographical locations and varied in size from small community hospitals to large urban hospitals. The population for this study also included 50 students from a Welsh university who had worked on the same wards as the nurse participants. The nurses and students who worked on the non-acute adult medical wards were targeted for inclusion in this study because they worked in a clinical setting that made them the most likely group of people working in these hospitals to come across patients with pressure ulcers.

Participants were recruited from hospitals of different sizes in different locations in order to enable the researcher to identify if the values that the nurses held were consistent or if they varied with the clinical setting or geographical locations of the hospitals. The students from a Welsh university were chosen because their university recruited its students from a large geographical area and deployed them to the aforementioned hospitals. This meant that the students who were recruited to this study were likely to have some experience of working on the same wards as the nurses recruited to this study.

Inclusion criteria

The main inclusion criteria for this study were:

1. The participants must have some experience of having looked after a patient with a pressure ulcer.

2. The participants must be nurses working on non-acute adult medical wards in the targeted hospitals or, be students (in their 2nd or 3rd year of training) with experience of working on non-acute adult medical wards in the targeted hospitals.

Given that the objective of this study was to identify the views of nurses on this topic, a concerted effort was made to recruit the same number of nurses from each of the different
professional tiers. This may seem unusual because there are more nurses in the lower professional tiers of nursing than there are in the higher echelons. Nonetheless, recruiting equal numbers of nurses from each professional tier was prioritised because it would enable this study to ascertain the value that nurses in each of the professional tiers placed on pressure ulcer prevention.

The initial recruitment target for this study was 2-3 nurses from each of the four professional tiers and 2-3 student nurses as shown in table 2.2 below.

Table 2.2 Initial recruitment target

<table>
<thead>
<tr>
<th>Number of participants</th>
<th>Professional tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3</td>
<td>Sister/Charge Nurse</td>
</tr>
<tr>
<td>2-3</td>
<td>Deputy Sister/Charge Nurse</td>
</tr>
<tr>
<td>2-3</td>
<td>Senior Staff Nurse</td>
</tr>
<tr>
<td>2-3</td>
<td>Staff Nurse</td>
</tr>
<tr>
<td>2-3</td>
<td>Adult Branch Student Nurse (2\textsuperscript{nd} or 3\textsuperscript{rd} year of training)</td>
</tr>
</tbody>
</table>

Only second and third year students were included in this study. This is because students only start to specialise in adult, child or learning disability nursing in their second year of training. This study recruited nurses who looked after adult patients, so it was important to ensure that the students who were recruited were also looking after adult patients. This ensured that the views of all the participants related to the same group of patients.

The recruitment target that was set at the onset of the study was not a definitive figure, as the objective was for the exact number of participants to be determined by the point at which data saturation occurred. Saturation was defined as the point at which no new categories or concepts emerged from the data in line with Straussian grounded theory (Denscombe 2003; Morse 2007). Flexibility in the sample size was also important because the values that nurses possess could have been subject to the vagaries of their local clinical environment, so the researcher would have had to recruit more participants than initially anticipated from any one of the hospitals to effectively saturate the data.
It is also possible that the sample size and the location(s) from which the participants were recruited in order to achieve saturation could also have been influenced by the questions that the researcher asked. The flexibility in sample size and the initial objective to recruit one participant from each clinical site also enabled the researcher to ameliorate the impact of the nurses taking time out of their clinical practice to participate in the interviews.

**Exclusion criteria**

Nurses and students who had not previously encountered a patient with a pressure ulcer were omitted from this study because it would have been difficult for them to define or gauge the worth of preventing something that they had never seen. It is not possible to state the exact number of potential participants that were excluded because all the materials used to recruit people to participate in the study stated that they needed to have seen a pressure ulcer.

Nurses who worked in specialist areas of adult medical nursing like Accident and Emergency or Outpatients were not included because they do not often look after patients at high risk of developing pressure ulcers for more than a few hours. Nurses who worked in other wards in the targeted hospitals were left out because the patients that they look after are less likely to develop pressure ulcers. Students who had not had a clinical placement on the non-acute medical ward were also omitted for the same reasons. The exclusion criteria for student nurses were slightly different because they tend to move from one ward to another after a few months. These nurses and students were omitted from this study and the consent forms and information sheets were not sent to them, so it is not possible to say how many of them were left out of this study.

Having established how the researcher intended to gather data, it is time to examine how data collection actually progressed in this study.

**2.4 Data collection**

Data were collected through audio recorded face to face semi-structured interviews to allow the participants to fully express their views without any undue influence from their colleagues. The qualitative free text data obtained from the interviews was then transcribed and interpreted through Straussian grounded theory (Strauss and Corbin 1998a; 1998b).
interpretation of qualitative free text data through grounded theory was aided by the standard qualitative computer analysis package NVivo. NVivo enables the researcher to analyse data and simultaneously provides an audit trail of the data analysis process (Welsh 2002). So, the data gathered was analysed with NVivo and interpreted with Straussian grounded theory.

This study also used individual interviews to gather data for other reasons. Semi-structured individual interviews provide the best means for collecting data from participants who can only be interviewed once (Law, Stewart et al. 1998; Bernard 1999). Semi-structured interviews were ideal in this instance because this study was undertaken when the Trust was undergoing a great deal of restructuring and nurses were being reassigned to work on different wards. So, there was no guarantee that there would be an opportunity to re-interview the same participants as some nurses in the trust opted to leave the Trust rather work on a different ward or be re-interviewed for their posts. Therefore, data collection in this study was predicated on the assumption that the researcher would only be able to interview each participant once.

The use of this method of data collection was advantageous in other ways. Individual interviews are the best way of exploring personal experiences and perspectives of research participants (King 1994; Giacomini and Cook 2000). The use of interviews also enabled the researcher to observe the participants’ verbal and non-verbal responses. The verbal and non-verbal responses of the participant in a study are a key part of the data (Law, Stewart et al. 1998; Pontin 2000). The use of interviews in this arguably provided the theory that was generated with greater depth and richness than an alternative method of data collection.

Individual interviews allow the researcher to clarify questions that are misunderstood and they and have a higher response and retention rate than other methods of obtaining data (Brink and Wood 2001a). Interviews also facilitate the collection of in-depth data because data collection is not inhibited by a rigid list of predetermined questions (Wengraf 2001). This was particularly important in this study because the list of questions that the researcher used at the onset of the study evolved as the provisional theory emerged. These advantages of individual interviews were especially valuable in this study because of the
obligation to explore all the concepts that differ from the provisional hypothesis in Straussian grounded theory.

Alternative methods of obtaining free text data like focus groups were considered but ultimately rejected for use in this study. This was primarily due to the logistical challenge of bringing together participants from a diverse range of participants at a time when potential participants were under a great deal of pressure and stress as a result of NHS restructuring. Thus, it is unlikely that it would have been possible to obtain rich, detailed data by other means that placed more demands on the participants.

2.4.1 Initial data collection
The recruitment of participants to this study proved to be quite challenging. The researcher was only able to invite potential participants from two out of fourteen hospitals in the target population. This was because the researcher was unable to gain permission to speak to potential participants in the other hospitals in the population for this study when data collection began.

A number of people who had volunteered to take part in this study subsequently withdrew. Some people withdrew because they said they were going on annual, maternity or study leave on the dates that they were due to be interviewed. These potential participants declined the researcher’s offer to reschedule the interview, so perhaps they had decided not to take part in this study. Other people withdrew from this study when the researcher turned up for the interview because of staffing issues on their wards or because their off-duty had been changed. When the researcher offered to reschedule the date and time for the interview, the majority of these potential participants opted to withdraw from this study because they said that their off-duty was subject to change at short notice due to staffing issues on their wards.

The participants who participated in this stage of the study were recruited from three different wards of a district general hospital, one ward from large urban hospital and three different student cohorts from the university. The demographic details of these participants are given in the table 2.3 overleaf, but their names have been replaced with pseudonyms to protect their confidentiality. All of these nurses worked on medical wards in different hospitals within the same NHS Trust, when this study was undertaken.
Table 2.3 Demographic details of participants in first stage of data collection

<table>
<thead>
<tr>
<th>Name</th>
<th>Job title and rank</th>
<th>Experience</th>
<th>Settings worked in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerys</td>
<td>Deputy Ward Manager</td>
<td>20 years</td>
<td>Another branch of nursing, Medicine</td>
</tr>
<tr>
<td></td>
<td>Band 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helen</td>
<td>Deputy Ward Manager</td>
<td>16 years</td>
<td>Medicine</td>
</tr>
<tr>
<td></td>
<td>Band 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cordelia</td>
<td>Senior Nurse Band 6</td>
<td>28 years</td>
<td>Armed forces, Care of the Elderly, Medicine, Private industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gladys</td>
<td>Deputy Ward Manager</td>
<td>40 years</td>
<td>Agency, Community, Care of the Elderly, Medicine, Nursing Home, Obstetrics and Gy</td>
</tr>
<tr>
<td></td>
<td>Band 6</td>
<td></td>
<td>naecology, Orthopaedics, Outpatients</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michelle</td>
<td>Ward Manager Band 7</td>
<td>20 Years</td>
<td>Care of the Elderly, Medicine, Nursing Home, Residential Home, Theatre and Recovery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victoria</td>
<td>Staff Nurse Band 5</td>
<td>10 Years</td>
<td>Medicine, Nursing Home, Private Healthcare</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joanne</td>
<td>3rd year student</td>
<td>3 years as</td>
<td>As a student nurse: Maternity, Medicine, Other branches of nursing, Surgery, Trau</td>
</tr>
<tr>
<td></td>
<td>(completed training but</td>
<td>a student</td>
<td>ma and Orthopaedics</td>
</tr>
<tr>
<td></td>
<td>awaiting registration as</td>
<td>23 years as</td>
<td>As an auxiliary nurse: Care of the Elderly, Haematology, Medicine</td>
</tr>
<tr>
<td></td>
<td>a staff nurse)</td>
<td>an auxiliary nurse</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Job title and rank</td>
<td>Experience</td>
<td>Settings worked in</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Leah</td>
<td>2nd year student (just about to commence final year of training)</td>
<td>2 years as a student</td>
<td>As a student nurse: Maternity, Medicine, Other branches of nursing, Surgery, Trauma and Orthopaedics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13 years as an auxiliary nurse</td>
<td>As an auxiliary nurse: Medicine</td>
</tr>
<tr>
<td>Catherine</td>
<td>2nd year student (middle of 2nd year of training)</td>
<td>2 years as a student</td>
<td>As a student nurse: Community, Obstetrics and Gynaecology, Maternity, Medicine, Other branches of nursing, Surgery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No other experience before training</td>
<td>No other experience before training</td>
</tr>
</tbody>
</table>

The interviews with the participants explored many aspects of their experiences of looking after patients with pressure ulcers as well as other pertinent professional issues. Once an interview had been undertaken and recorded via a digital recorder with the permission of the participant. All the participants agreed to have their interviews recorded and the interviews were transcribed verbatim and analysed in conjunction with the field notes that the researcher had made.

After the first stage of data collection and analysis, it became apparent that more data needed to be collected in order to generate a robust theory so a second stage of data collection was undertaken. This was due to the fact that the integration of the theoretical framework could not be undertaken after the initial data collection because the tentative theory and core category were not sufficiently robust.

**2.4.2 Second stage of data collection**

The tentative grounded theory that emerged from the analysis of data after the initial phase of data collection raised a number of emergent categories that merited further investigation. The participants in the first stage of data collection highlighted a number of
issues pertaining to nurse education and nurse management and given that these categories had not achieved saturation, a second stage of data collection and analysis was undertaken. The initial data analysis also highlighted the fact that a different sample of participants of senior nurse managers and nurse lecturers was needed in order to fully explore the categories and concepts that did not fit in with the provisional theory. Gathering data from senior nurse manager and nurse lecturers in the second stage of data collection had added importance because the initial phase of data collection and analysis was unable to establish a core category that explained the phenomenon that was occurring in the data.

A second round of data collection and analysis was undertaken with a different sample of nurses in order to fully explore all the tentative categories from the first stage of data collection pertaining to nurse education and management. This was in line with the principle of theoretical sampling, which requires the exploration of emergent categories and concepts that do not fit the emergent theory until saturation is achieved (Strauss and Corbin 1990; Cutcliffe 2000a). Permission was obtained to extend the data collection phase of this study from the relevant research governance bodies because by this junction the original permission for data collection had lapsed (see appendices 12, 13, 14 and 15 on pages 266, 267, 268 and 269 respectively).

The provisional theory from the first stage of data collection indicated that nurses lecturers and senior nurse managers needed to be recruited to this to induce a robust Straussian grounded theory. So, the researcher targeted all the nurse lecturers that were cohort leaders for students in the adult branch of nursing and the senior nurses from all 14 hospitals in the population for this study.

The nurse lecturers expressed a willingness to participate in this study, but most of them declined to take part in this study when they informed that participation in this study entailed individual recorded interviews. The nurse lecturers that withdrew from this study stated that they were only prepared to have their views recorded if the researcher asked questions in a full departmental meeting. It is difficult to comment on the motivation behind this request by the nurse lecturers, but perhaps they just did not want to take part. There was only one nurse lecturer who was prepared to take part in an individual recorded interview and her views are included in this thesis.
The recruitment of senior nurse managers was just as challenging, because it included a large number of people who had been reluctant to let their staff participate in the study. Nonetheless, the researcher was keen to recruit senior nurse managers whose staff had not taken part in the initial stage of data collection in order to ascertain if some of the issues raised in the first stage of data collection were pertinent to nurses working in the other 12 hospitals in the population. With a great deal of persuasion, a number of senior nurse managers from the 12 hospitals sites where no staff had participated in the first stage of data collection volunteered to take part in this study. The senior nurse managers that took part ran hospital wards in more than one hospital site, so the objective of recruiting participants from all fourteen hospital sites and the university in the target population was eventually achieved.

The demographic details of the participants in this stage of data collection are given in table 2.4 below, but their names have been replaced with pseudonyms to maintain confidentiality. Permission was gained to amend the interview schedule in order to explore some of the themes that had emerged from the first stage of data collection in greater detail (see appendices 16 and 17 on pages 270 and 271).

<table>
<thead>
<tr>
<th>Name</th>
<th>Job title and rank</th>
<th>Experience</th>
<th>Settings worked in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millie</td>
<td>Principal Lecturer</td>
<td>20+ years</td>
<td>Intensive Care, Medicine, Nurse Education, Surgery</td>
</tr>
<tr>
<td>Julia</td>
<td>Senior Nurse Manager Band 10-12</td>
<td>20+ years</td>
<td>Community and Hospital settings</td>
</tr>
<tr>
<td>Ella</td>
<td>Senior Nurse Manager Band 10-12</td>
<td>20+ years</td>
<td>Community and Hospital settings</td>
</tr>
<tr>
<td>Tabitha</td>
<td>Senior Nurse Manager Band 10-12</td>
<td>20+ years</td>
<td>Community and Hospital settings</td>
</tr>
<tr>
<td>Ruby</td>
<td>Senior Nurse Manager Band 10-12</td>
<td>20+ years</td>
<td>Community and Hospital settings</td>
</tr>
<tr>
<td>Name</td>
<td>Job title and rank</td>
<td>Experience</td>
<td>Settings worked in</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td>------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Mia</td>
<td>Senior Nurse Manager Band 10-12</td>
<td>20+ years</td>
<td>Community and Hospital settings</td>
</tr>
<tr>
<td>Darlene</td>
<td>Senior Nurse Manager Band 10-12</td>
<td>20+ years</td>
<td>Community and Hospital settings</td>
</tr>
</tbody>
</table>

### 2.5 Data analysis

Substantive analysis of the data from all the interviews began with the line by line coding of the interview transcripts with constant comparative analysis and then proceeded into rest of the six stages of Straussian grounded theory analysis. A Straussian grounded theory is generated via a six step process that adheres to the basic tenet of constant comparison until saturation is achieved and no new concepts are generated (see table 2.5 below) (Strauss and Corbin 1998b; Dey 1999; Boychuck-Duchscher and Morgan 2004).

**Table 2.5 Six stages of Straussian grounded theory analysis**


1. Simultaneous data collection and analysis
2. A three step coding process using a Coding paradigm
   a. Open coding
   b. Axial coding
   c. Selective coding
3. Comparative methods
4. Memo writing to aid conceptual analysis construction
5. Sampling to refine the emergent theoretical ideas
6. Integration of the theoretical framework

The data gathered in this study was simultaneously analysed through constant comparison. Constant comparison is an analytic approach that gives rise to increasingly abstract concepts
and theories through the inductive comparisons of data, categories and concepts (Strauss and Corbin 1998b; Backman and Kyngas 1999). The simultaneous collection and analysis of data increases the rigour of a theory because the emergent hypotheses is continually challenged with novel data, which ensures that the theory that is generated possesses a high level of precision and consistency (Corbin and Strauss 1990). The use of constant comparison meant that the analysis of data from each interview contributed to the provisional theory, as well as influencing the subsequent data collection and sampling in this study. These properties of constant comparison also ensured that all the avenues of enquiry that warranted closer scrutiny were explored. Consequently, the specific questions that were asked evolved throughout the tenure of the study as some categories achieved saturation and others merited further investigation.

Each of the nascent categories in this study was compared with incidents in order to establish the properties of the categories. The comparison of tentative categories with incidents ensures that all the aspects that are potentially relevant to the theory are identified as soon they are perceived (Corbin and Strauss 1990; Benton 2000). The nascent categories were subsequently compared and contrasted with other tentative categories in a process that lead to the emergence of a core category that underpinned the theory. The process of conceptualising data and the creation of a core category was undertaken through the three stage coding process of Straussian grounded theory.

The coding of data in this study began with open coding. This entailed reviewing the data line by line with a critical mind in order to discern what each piece of data was about and what it exemplified (MacDonald 2001a; Corbin and Strauss 2008). This was important because open coding is focused on the identification, naming, categorisation and description of the phenomena located in the data through constant comparison (Strauss and Corbin 1990; Babchuk 1996). The initial codes, their concomitant properties and categories that emerge from open coding are not rigid but are subject to amendment in the emergence of novel data (Strauss and Corbin 1990; Higginson 2007). Open coding creates a number of categories and facilitates the identification of their properties, which enables the researcher to combine these tentative categories into broader categories with distinct properties (Corbin and Strauss 2008). The use of open coding gave rise to 86 open codes in this study (see appendix 18 on page 272).
After the open codes had been identified, the analysis of data proceeded into axial coding. In axial or theoretical coding, the relationships and associated properties of the tentative codes and categories are examined in order to establish the nature of the links between the different categories (Locke 2001; MacDonald and Schreiber 2001b). The initial axial coding of the data in this study amalgamated the 86 initial open codes into 15 different sub categories (see appendix 19 on page 274). Axial coding highlights what is occurring in the data so that the relationships between and amongst the categories can be unearthed (Strauss and Corbin 1998a). Establishing relationships between categories in axial coding also enables the researcher to make complete explanations about the data (Goulding 2002; McCann and Clark 2003a). This characteristic of axial coding also provided the researcher with an insight into the contextual factors and made patterns in the data more conspicuous. As a result, the 15 sub categories were integrated into seven broader categories according to the similarities in their characteristics and properties (see appendix 20 on page 277).

The entire axial coding process in this study was supported by a coding paradigm. This was important because axial coding encompasses more than just labelling text; it is about the development and naming of categories (Strauss and Corbin 1998a; Kelle 2007). This study used the classic Straussian grounded theory “six c” coding paradigm during axial coding. The use of six c coding paradigm entails examining categories in terms of their causes, conditions, contexts, consequences, co-variances and contingents (Schreiber 2001b; Goulding 2002). The use of this coding paradigm also enabled the researcher to gain a more detailed insight into the relationships between categories and what was going on in the data. The iterative process of axial coding and the insights gained from the use of the coding paradigm resulted in the emergence of three possible core categories from the seven broad categories (see appendix 21 on page 278). An example of the manner in which coding progressed from open categories to possible core categories is also set out in appendix 22 on page 279.

Once three potential core categories emerged, data analysis shifted into selective coding. Selective coding is the cessation of open coding and focusing on only coding the variables that relate to the core category with the other codes and categories becoming subservient (Dey 1999; Corbin and Strauss 2008). The entire process of selective coding is also supported by the six c coding paradigm. In selective coding, a core category is selected
through a process that establishes and validates its relationships with other categories and develops the other subservient categories where necessary resulting in an integrated and refined theory (Strauss and Corbin 1998a; McCann and Clark 2003a). The researcher was unable to establish a core category that explained the phenomenon that was occurring in the data after the first stage of data collection. After further data collection and analysis, a core category emerged around which a theory could be formed. This core category met the criteria for a robust core category (see table 2.6 below).

**Table 2.6 Criteria for a robust core category**
Adapted from Strauss and Corbin (1998a), Benton (2000), Schreiber (2001a) and Corbin and Strauss (2008).

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is central to the theory</td>
</tr>
<tr>
<td>2. It accounts for the majority of differences in behavioural patterns</td>
</tr>
<tr>
<td>3. It is a recurring item in the data</td>
</tr>
<tr>
<td>4. It is clearly related to most of the other categories</td>
</tr>
<tr>
<td>5. It properties and exact nature take longer to define than those of more peripheral categories</td>
</tr>
<tr>
<td>6. It has very clear implications for the grounded theory</td>
</tr>
<tr>
<td>7. The generation of a theory advanced once it is discovered and its properties identified.</td>
</tr>
</tbody>
</table>

The entire coding process in this study was underpinned by the use of comparative methods. Comparative methods were used throughout the tenure of this study because they facilitate the generation of categories (Benton 2000). Comparative methods build categories in a step by step process were data are coded and conceptualised into properties (Corbin and Strauss 2008). This process entails making comparisons between data and data, data and concept, concept and concept, concept and category, category and category occurred at every step of data analysis (Strauss and Corbin 1998a; 1998b). These comparisons enables key themes and people to be identified by clarifying the properties of
the research phenomenon, which also determines the future direction of the study as it influences theoretical sampling (Strauss and Corbin 1990; Backman and Kyngas 1999). In this study, the use of comparative methods culminated in theoretical saturation and the emergence of a single core category.

The entire process of data coding and categorisation in this study was underpinned by memoing. Memos are notes that the researcher makes throughout the coding process, which collate the researcher’s thoughts, interpretations and ideas about where to collect further data as well as the conceptual relationships that exist between different categories (Higginson 2007; Corbin and Strauss 2008). Memoing is a key part of generating a Straussian grounded theory because it aids conceptual analysis construction (Lempert 2007). The memos that the researcher created were juxtaposed with field notes and combined with the emergent categories to induce a theory.

The use of memos in Straussian grounded theory is recommended because they are a rich repository of ideas that guide data collection and analysis, while also providing greater conceptual detail in the emergent theory (Dey 1999; Corbin and Strauss 2008). The memos proved to be an invaluable aid to the researcher because they highlighting the codes and categories that required further exploration and integration. An example of the manner in which memos were used in this study is provided in appendix 23 on page 280. The memos that were used in this study also fulfilled the criteria for a good memo in a Straussian grounded theory study (see table 2.7 overleaf).
Table 2.7 Criteria for a good memo

1. It defines the analytic properties of each code or category
2. It explicates the processes that are subsumed by the codes or categories
3. It facilitates comparisons between categories and codes
4. It contains raw data
5. It provides sufficient empirical evidence to buttress the researcher’s definitions of categories and the associated analytic claims
6. It provides tentative theories that can be subsequently tested
7. It identifies gaps in the data analysis and where further data are required

Theoretical sampling was also used in the collection and analysis of data in this study. Theoretical sampling refers to the manner in which data are gathered in order to create a theory with coding and analysis in one stage influencing data collection in the next stage (Locke 2001; Draucker, Martsolf et al. 2007). The use of theoretical sampling provides an insight into the conditions in which the categories occur; their range of properties and which of these properties are the most stable (Corbin and Strauss 2008). This study began with purposive sampling and then moved to theoretical sampling once simultaneous data collection and analysis was underway.

Theoretical sampling facilitates the questioning of the initial data gathered and the dense description of the topic under investigation, which makes it an intrinsic part of the inductive Straussian grounded theory approach (Cutcliffe 2000a; Schreiber 2001a). The use of theoretical sampling also inspires the exploration of issues that emerge in the data whose properties and dimensions are yet to be fully elucidated when recruiting subsequent participants (Locke 2001; Denscombe 2003). This is consistent with the principle of constant comparison, which is at the heart of theoretical sampling because it helps to create a provisional theory that is used to determine subsequent data collection (Corbin and Strauss 2008). In this study, theoretical sampling highlighted the types of participants that were needed in order to fully explore the codes and categories that merited further investigation.
This is typified by the differences in the participants who were recruited in the two stages of data collection. So, theoretical sampling a key aspect of data collection and analysis in this study because it enabled the researcher to refine the emergent theoretical hypotheses.

The final stage of data analysis in this study was the integration of the theoretical framework. The integration of the theoretical framework is a process by which the core category is used to create a theoretical framework around which the Straussian grounded theory is integrated (Strauss and Corbin 1990; McCann and Clark 2003a). The integration of a theoretical framework utilises the concepts and categories generated by all the preceding stages in conjunction with memos to create a theory (Corbin and Strauss 2008). This stage of data analysis also focuses on the identification of the properties of the main categories and the relationships between categories in order to create a higher level theory with a few key concepts (Dey 1999; Streubert and Carpenter 1999a).

The emergence of a theoretical framework around the core category also solidifies the analysis of data by enabling the differentiation of the core and peripheral categories, as well as identifying the breadth and limitations of the theory (Cutcliffe 2000a; Corbin and Strauss 2008). The researcher was able to identify a robust core category and integrate a theoretical framework after the second stage of data collection in this study, which facilitated the induction of a robust grounded theory.

The analysis of data in this study was supported by selective literature sampling, which helped to identify any gaps in knowledge, clarify the concepts involved and bolster the quality of the theory formulated by increasing the researcher’s theoretical sensitivity (MacDonald and Schreiber 2001b; McCann and Clark 2003a). This was possible because literature is a rich source of historical and contemporary information that provides secondary data, validates the theory and spawns questions about the data (Strauss and Corbin 1990; Clarke 2003). These properties of selective sampling of literature helped the researcher to analyse the data and integrate a theory.

**Chapter summary and conclusion**

This chapter has set out the process by which the research method for this study was selected. The manner in which this research method was used to gather and analyse data in
this study was also elucidated and this will be used to evaluate the rigour of the theory that emerged from this study in subsequent chapters.

The research method for this study was selected after a process which took into account the objectives of this study and the impact of world views on values research. The careful examination of each research method was important because the research paradigm that is adopted determines the types of values that can be measured. The post-modernist view of values was adopted because it was the worldview that was the most consistent with the objectives of this study. The adoption of a post-modernist stance on values meant that only qualitative research methods could be used in this study because other types of research methods are incompatible with this world view.

After all the qualitative research methods were scrutinised, Straussian grounded theory was deemed to be the best research method. This was because the philosophical underpinnings of Straussian grounded theory and its concomitant tenets were the most consistent with the objectives of this study compared to other qualitative research methods. Like any other research study, the recruitment of participants to this study proved to be challenging; but enough participants were recruited to generate a robust theory. Data collection was undertaken in two stages from two different groups of participants because it was not possible to induce a robust theory after the first stage of data collection. The entire process of data collection and analysis adhered to the principles of Straussian grounded theory. Data collection and analysis was underpinned by the use of field notes, memos and the selective sampling of literature. The use of these tools helped the researcher to induce a robust Straussian grounded theory about the value that nurses place on pressure ulcer prevention.

Having established the manner in which the research method was selected and used, the next two chapters will present and discuss the findings of this study.
Chapter 3: Findings and discussion

Introduction

Three main themes emerged from the data in this study. The first theme relates to the impact that the value that nurses place on pressure ulcer prevention has on the skin care that patients receive in clinical practice. The other themes centre on the manner in which this value was formed and the value that nurses place on other aspects of nursing. The findings pertaining to the first theme will be discussed in this chapter and the other themes will be discussed in the next chapter.

The findings of this study will be presented in a discursive format and discussed alongside the best available research evidence and pertinent literature. The quotes that will be discussed in this thesis are representative of the views expressed by the participants in this study. Where the participants expressed differing opinions, this will be clearly stated and quotes representing each perspective will be presented and discussed. The discussion of the findings will also show how a robust, conceptually dense grounded theory that provides an original insight and facilitates a broader understanding of the value that nurses place on pressure ulcer prevention was integrated.

This chapter discusses the findings pertaining to the value that nurses place on pressure ulcer prevention and the impact that it has on the skin care that patients receive. This discussion will also consider different factors that the participants cited as impacting on their ability to deliver skin care that is consistent with their values. This will proceed in to an examination of the relationship between nurses’ values and their delivery of care to maintain the skin integrity of their patients. This chapter concludes with a summary of the main points that can be drawn from the findings pertaining to the value that nurses place on pressure ulcer prevention and the manner in which they deliver skin care to their patients.

3.1 Value of pressure ulcer prevention

All the participants in this study stated that they placed a high value on pressure ulcer prevention. This is not surprising because they all volunteered to participate in this study, but they also maintained that their nursing colleagues placed a low value on pressure ulcer prevention:
Cerys (Deputy Ward Manager): “I think it’s a marmite thing you either love wounds like pressure sores or you hate them. Some nurses like myself, are interested in wound care and prevention, but other nurses are not interested, because it’s not a sexy subject. The nurses that love wound care will think about them even when the patient has no wounds, but the nurses who hate wound care try to avoid dealing with their patient’s wounds!”

Victoria (Staff Nurse): “Nurses are generally quite lax about pressure sore prevention, because they are more focused on medical interventions instead of nursing interventions.”

The participants also felt that the patients’ families and the general public placed a low value on pressure ulcer prevention because they were unaware of how quickly pressure ulcers could develop:

Gladys (Deputy Ward Manager): “The public don’t realise that you can get pressure sores from just sitting in one position for a while. The public don’t realise that if somebody’s collapsed at home they can get a pressure sore, because they have been lying on a hard concrete floor for twelve hours.”

Victoria (Staff Nurse): “Generally speaking the patients’ families are not too bothered with preventing pressure sores. In my observation, (when) a family visits their relative they rarely say nurse, I think my mum has been sitting out for ages, can you just check her pressure areas. I don’t think the patients’ families are focused on pressure sore prevention.”

The participants’ statements about the value placed on pressure ulcer prevention are augmented by evidence from other studies. An multisite cross sectional survey in Ireland reported that 99% of 121 nurses who took part expressed a positive attitude towards pressure ulcer prevention (Moore and Price 2004). This suggests that the participants in this survey placed a high value on pressure ulcer prevention, because there is empirical evidence which shows that a person’s values influence their attitudes and behaviour (Razavi 1999; Bernard 2002). It must be noted that the positive attitude that the nurses in this Irish survey expressed towards pressure ulcer prevention was not reflected in their practice as some of their patients did not even have a care plan for maintaining skin integrity (Moore and Price 2004).

Although this Irish survey examined nurses attitudes, its results support the finding of this study that there are nurses who place a high value on pressure ulcer prevention. This is because this survey provides robust evidence which shows that nurses have a positive
attitude towards pressure ulcer prevention, which suggests that they place a high value on pressure ulcer prevention as attitudes are known to be influenced by values.

The participants’ contention that their colleagues place a low value on pressure ulcer prevention is also akin to the results of Maylor’s (1999) and Athlin, Idvall et al.’s (2010) studies. The majority of nurses in these studies stated that the prevention of pressure ulcers was less important than other aspects of clinical practice (Maylor 1999; Athlin, Idvall et al. 2010). One of these studies was a Welsh survey which primarily focused on the relationship between the relationship between knowledge, locus of control and pressure ulcer prevention in clinical practice. The other study was a Swedish qualitative content analysis study which limits to extent to which its findings can be applied to other settings. While these studies have their limitations, their findings support the view of the participants in this study that there are some nurses who place a low value on pressure ulcer prevention.

Some elements of the findings of this study are not supported by evidence from other studies. The participants in this study claimed that they all place a high value on pressure ulcer prevention, but some of their nursing colleagues place a low value on it. This is different from the other studies that have been reviewed in this section, where the participants in each of the other studies have been reported to place the same value on pressure ulcer prevention as their colleagues.

The participants’ view that pressure ulcer prevention is a topic is undervalued by the public, patients and their families is not supported by any research evidence but is supported by expert opinion. In papers which consider different aspects of pressure ulcer prevention and management, Cherry (2006) and Butler (2008) maintain that pressure ulcer prevention is an aspect of healthcare that is undervalued by the general public and the government. The views expressed by these tissue viability experts and researchers are underpinned by their own clinical experiences and reviews of pertinent literature. So, the accounts of the participants in this study are supported by the views of some tissue viability experts.

The findings of this study suggest that there is a difference in the value placed on pressure ulcer prevention by the participants, other nurses and the general public; but these findings must be interpreted with caution. This is because all the participants in this study said that they placed a high value on pressure ulcer prevention unlike their nursing colleagues and
the public who placed a low value on pressure ulcer prevention. On the other hand, the participants did not specify what the exact difference was between their perception of the value of pressure ulcer prevention and that of their colleagues and the general public. It was not possible to ascertain the latter aspect using this research design, because an unobtrusive measure was used to ascertain the participants’ values and the participants were unaware that the researcher was eliciting their values.

It is possible that the participants said that they placed a high value on pressure ulcer prevention while their colleagues place a low value on pressure ulcer prevention in order to portray themselves in a positive light. On the other hand, the participants in this study were not aware that the researcher was eliciting their values when they were interviewed. Most of the participants in this study were either the link nurses for tissue viability on their wards or they were in senior positions in the hospitals or university. Therefore, these participants were well placed to judge the pressure ulcer related values and practices of their colleagues. This does not discount the possibility that the participants’ statements about their colleagues may have been inaccurate. So, the findings of this study with regards to nurses who place a low value on pressure ulcer prevention are solely based the participants’ accounts.

The findings of this study with regards to the value placed on pressure ulcer prevention have advanced knowledge about nurses’ values and pressure ulcer prevention. The participants state that some nurses place a high value on pressure ulcer prevention, while other nurses place a low value on pressure ulcer prevention. It must be borne in mind that the existence of nurses who place a high value on pressure ulcer prevention is underpinned by direct data, while the existence of nurses who place a low value on pressure ulcer prevention is only based on indirect data from the participants’ statements. This means that it is difficult to make any definitive statements about nurses who place a low value on pressure ulcer prevention on the basis of this study as all the participants were found to place a high value on pressure ulcer prevention.

This study has increased what is known about pressure ulcer prevention by identifying that the value that a nurse places on pressure ulcer prevention may vary with each individual nurse. It is possible that the additional insight into the value placed on pressure ulcer
prevention by nurses provided by this study is due to the fact that the researcher identified a unique sample of participants or used a different research methodology from the other studies.

The participants stated that the public places a low value on pressure ulcer prevention, which is a view that has been expressed by tissue viability experts, but has not been previously reported in any other study. If the participants’ perception is correct, this might explain why some of their nursing colleagues place a low value on pressure ulcer prevention. This is because empirical evidence from value studies suggests that values are susceptible to socio-cultural influences (Hebel 1998; Pakizeh 2005). The extent to which this evidence from values studies can be directly applied to this study is open to question. This is because the research on values and socio-cultural factors has focused on people’s world values like honesty (Goodwin 2001; Allen, Ng et al. 2002), while this study focuses on the value that nurses place on pressure ulcer prevention. Despite this, the evidence showing a link between world values and socio-cultural factors is robust. Therefore, it is possible that the value that people place on pressure ulcer prevention is influenced by socio-cultural factors. If this is the case, then a society that places a low value on pressure ulcer prevention is bound to have some nurses who place a low value on pressure ulcer prevention.

3.1.1 Values and variations in patient care

The participants felt that the calibre of skin care that patients received was strongly influenced by the value that a nurse placed on pressure ulcer prevention and other factors:

Catherine (2nd year student): “The quality of pressure area care was very good on my first ward, but on my last placement, in gynaecology, I was the only one completing the patients’ pressure sore risk assessments. The gynaecology nurses didn’t take any preventative measures or keep the patient’s pressure area care plan up to date because they didn’t expect to see patients with pressure sores as they had a high turnover of patients.”

Joanne (3rd year student): “The standard of pressure area care really varies. If you’ve got a member of staff that is really interested in that subject, they tend to be more up on it. On my last ward (placement), one of the nurses devised her own wound care chart and every day we would measure and describe what the wound looked like in the chart. The nurse on this ward had actually devised that (wound care) chart herself and implemented its use on the ward, which worked really well. So I think the calibre of (pressure area) care is down to the nursing staff.”
The reported variations in the quality of skin care that are highlighted by the participants are consistent with what is known about values and their impact on a person’s behaviour. To put it simply, the participants’ assertions reinforce the point that is made in the previous section about the relationship between a nurse’s values and actions. Thus, the participants’ views about variations in care add credence to the idea that nurses who place a high value on pressure ulcer prevention deliver a higher standard of skin care than their colleagues who place a low value on pressure ulcer prevention.

It is possible that patients on a gynaecology ward are less likely to develop pressure ulcers than those in other settings, but the hospital policy in this trust states that all ward based nurses are expected to ensure that their patients’ pressure ulcer related documentation is accurate and up to date. The importance of maintaining accurate and up to date pressure ulcer related documentation is emphasised in policies that underpin nursing practice like the Essence of Care (D.H 2011a) and the Fundamentals of Care (Welsh Government 2003). In addition, poor pressure ulcer related documentation is one of the issues that can lead to a healthcare professional being prosecuted for harming a patient if they subsequently develop a pressure ulcer under the Protection of Vulnerable Adult (POVA) scheme (D.H 2009). Therefore, all nurses have a legal imperative to assess all their patients for the risk of skin disintegration and to maintain accurate and contemporaneous pressure ulcer related patient documentation.

The reports that there are some nurses who do not assess their patients’ risk of developing pressure ulcers or maintain up to date pressure ulcer related documentation suggests that these nurses are contravening the Trust’s policy and not fulfilling their legal responsibilities as set out in documents like the NMC (2008c) guidance on record-keeping for nurses. Although this is a cause for concern, a more measured view of nurses in clinical practice is required because these accounts of the manner in which some nurses deliver skin care to their patients are not supported by any direct evidence. There may also be other explanations which account for the observations that are made by the participants in this study. One such explanation is that the participants’ colleagues may have assessed their patient’s risk of skin disintegration and delivered the requisite care, but simply did not get round to documenting it in the patients notes. If it is true that there are some nurses who deliver care to maintain skin integrity but do not get round to documenting the care given, it
is difficult to see how these nurses would be able to defend themselves from a legal and professional standpoint if one of their patients subsequently developed a pressure ulcer.

The evidence from Trust policy and other documents that underpin the delivery of nursing care in clinical practice appear to bolster the participants’ assertion that nurses who do not assess their patients’ risk of skin disintegration or document the care given to maintain their skin integrity, place a low value on pressure ulcer prevention. It must be noted that the practice of nurses who place a low value on pressure ulcer prevention is solely based on the participants’ statements. So, there may be other factors that account for the variations in care that the participants highlighted.

The participants conceded that there were issues that affected a nurse’s ability to deliver skin care that was consistent with their values. Despite these issues, the participants argued that they did all that they could to prevent pressure ulcers:

**Joanne (3rd year student):** “The calibre of pressure sore prevention care that patients receive is down to interest of a particular nurse and the staffing levels on the ward, because when the nurses are short staffed and under a lot of pressure to a lot of get things done, patients don’t get moved as regularly as they should be and dressing changes are postponed.”

**Cordelia (Senior Staff Nurse):** “We have occasions where we are extremely busy and pressure areas get missed. I’m one of these nurses that even if I’ve got a group of patients to care for, I like to check their bums myself.”

The participants’ assertions that time pressures and staffing levels tend to push pressure ulcer prevention down the list of priorities is validated by the results of other studies.

Nurses have been found to place a low priority on aspects of nursing that require direct patient contact like pressure ulcer prevention in studies by Irurita (1996) and Bowers Lauring et al. (2001). These studies both used a qualitative research method, which limits the extent to which their findings can be applied to other settings. On the other hand, both studies had relatively large numbers of participants for qualitative studies and reported similar findings on the prioritisation of patient care even though they were undertaken in different settings, which suggest that their results are worth noting. The generalisability of these studies is limited, but they provide robust evidence which validates the participants’ view that pressure ulcer prevention can be pushed down the list of priorities by other factors in clinical practice.
The findings that have been presented thus far suggest that the prioritisation and delivery of skin care to patients are influenced by the value that a nurse places on pressure ulcer prevention. There also appear to be other factors that affect the prioritisation and delivery of care to prevent ulcers. These factors and their impact on patient care will now be examined in greater detail in the next few sections.

3.2 Clinical priorities and pressure ulcer prevention

A number of factors in clinical practice were identified by the participants as priorities which affected their ability to deliver skin care to their patients that was congruent with the value that they placed on pressure ulcer prevention.

**Bed management**

All the participants including the senior nurse managers said that bed management (or managing the admission and transfer of patients) was the main priority in clinical practice and it determined how all the other nursing interventions were prioritised. They all felt that the emphasis on bed management sometimes hindered their ability to provide good care and often compromised patient safety:

*Catherine (2nd year student)*: “There is big pressure on the nurses working on the wards for beds from bed management because bed management is such a big thing now. Bed management say to the wards: we need to get these people in, taken care of and out, so that we can get a bed for new admissions as soon as possible. So the pressure to provide beds for new admissions has taken away the focus from the other aspects of patient care.”

*Julia (Senior Nurse Manager)*: “I have worked in the acute hospitals and bed management so I have experienced bed management from all angles. Bed management is an issue that creates a lot of pressure on the nurses on the wards, because you have the senior nurses pressurising the qualified nurse on the ward all the time, and repeatedly asking: who can you move? And when you say: I can’t move any of the patients because they are not ready, the senior nurses say: oh, well who’s the best candidate to be moved? That patient will have to go somewhere else because YOU HAVE GOT TO HAVE THIS OTHER PATIENT HERE! Just choose the patient who will make the least noise about being moved and transfer them!”

The non-clinical participants in this study conceded that bed management was the number one priority in clinical practice. The non-clinical participants highlighted the fact that the pressure to prioritise bed management left patients susceptible to poor care. The principal
lecturer pointed out that some bed managers were so aggressive in their approach that nurses felt compelled to transfer patients even if they did not feel that it was safe to do so:

Ella (Senior Nurse Manager): “Bed management is a very real pressure for the nurses who work on the ward. Unfortunately, the patients that we have to move as a result of the insistence of bed management are always very vulnerable to poor care.”

Millie (Principal Lecturer): “Bed managers hugely complicate the way that nurses make decisions. Nurses are pressurised into making decisions by bed managers that compromise the safety of patients. The nurses out there (in clinical practice) are forced to make decisions that compromise the patient’s safety and they can’t do anything about it. You have very feisty bed managers (in the hospitals) who can be aggressive and insist that the patient is transferred, when you as a nurse might not be happy to transfer that patient.”

The participants’ views about the impact that bed management has on the prioritisation and delivery of different aspects of nursing care is in line with the increased demand for hospital beds that has been reported over the last decade. The fact that all of the participants in this study highlighted bed management as the main priority for nurses in clinical practice suggests that this is an important finding.

There is some evidence from other sources which supports the views expressed by the participants in this study. Wales has an excessive number of emergency hospital admissions compared to other parts of the UK, which places undue pressure on hospitals for beds (Jones 2009). The high demand for beds in Wales often leads to inappropriate patient transfers, which often have a negative impact on the quality of care that patients receive (Jones 2009). These findings emerged from a Welsh Government commissioned report that was written after a comprehensive review of Welsh primary and community care. This report was primarily focused on care in the community, but it provides the best and most up to date evidence about bed management issues in Wales because it evaluated information provided by the Welsh Government and other healthcare organisations in Wales. So, the findings of this report are probably worth noting.

Concerns have also been raised about the impact that issues pertaining to patient discharges have on patient care and outcomes in other parts of the UK have been raised in reports by the CSCI (2004; 2005) and opinion papers published by healthcare commentators (Baumann, Evans et al. 2007). Therefore, the evidence that is available supports the views of the participants in this study that bed management is one of the foremost priorities in
clinical practice. The evidence also shows that no other study has highlighted the impact that bed management has on patient care, which indicates that the relationship between bed management and patient care which is highlighted in this study is a novel finding.

**Doctors ward round and the drug round**

The students and ward based nurses stated that nurses in clinical practice were also compelled to prioritise the doctors’ ward round and the drug round above pressure ulcer prevention. Consequently, they argued that nurses had very little time to participate in pressure ulcer prevention, which was delegated to nursing auxiliaries. Some of the non-clinical nurses agreed with the views of the students and nurses, but others took a different view:

Leah (2nd year student): “The qualified nurses have got to do all the medications for fifteen patients to twenty patients, which is very time consuming and when they’ve done that, they’ve got to go on the doctors’ rounds. The nurses are very busy because they have to oversee the care of the patients and make sure that the paper work is up to a standard ready for handover as they go around the ward. The drug rounds are generally done when patients are being washed in the morning, so the nurses are not involved in washing their patients. During the rest of the day nurses are busy with other things so the turns are done by the auxiliaries.”

Julia (Senior Nurse Manager): “Registered nurses can’t be busy with the drug and doctors rounds day and night, such that they can’t give their patients fundamental care! The acute hospitals have got more than one registered nurse on each ward and you only need one nurse to do the drug round and another one or two nurses to do the doctor’s round. I don’t know if the nurses’ prioritisation, especially the low priority attached to pressure area care, is related to the amount of time that they have spent in nursing, or if nurse education nowadays does not highlight the importance of the fundamentals of nursing care.”

There is no evidence or opinions that support the participants’ statements about the relative importance of the doctors’ ward round, the drug round and pressure ulcer prevention. On the other hand, the participants’ views are logical if bed management is one of the main priorities in clinical practice. This is because if the primary objective is to get patients transferred from a ward as quickly as possible, then getting a diagnosis and treatment plan from the doctors and initiating the necessary drug therapy automatically become the next highest priorities for the nurses. Thus, the participants’ statements are supported indirectly by the evidence on bed management and by simple logic.
The prompt discharge of patients from hospital wards is a priority for the NHS, but tenure of a patient’s hospital stay is of limited relevance to pressure ulcer prevention. There has been a concerted effort by the government and NHS to reduce the number of patients whose discharge from hospital is delayed over the last 14 years, because of the cost that staying in hospital longer than necessary has on the individual and the NHS (Baumann, Evans et al. 2007). This impetus has resulted in legislation, initiatives and guidelines designed to ensure that patients do not stay in hospital any longer than is necessary, which have been effective in some hospitals (D.H 2003a; D.H 2003b; Baumann, Evans et al. 2007).

On the other hand, the main objective with regards to the maintenance of skin integrity is to ensure that all patients are assessed for their risk of developing pressure ulcers and receive the appropriate care to protect their skin (NICE 2001a; EPUAP and NPUAP 2009a; AWTVNF 2011). When patients are discharged from a hospital ward, it is important that patients have an active treatment plan for the condition which resulted in their admission to that ward. It is also equally important that the patients and the people that will be looking after them after they are discharged from a given hospital ward are informed about the measures that they have to take to ensure that the patient’s skin remains intact. So, what matters in pressure ulcer prevention is not how long a patient stays in a ward; but what measures are taken to protect the patients’ skin while they are on that ward and when they are discharged home or to another care setting.

### 3.2.1 Clinical priorities and care delivery

The ward based participants maintained that clinical priorities like the doctor’s ward round impeded their ability to look after their patients’ skin properly. Nonetheless, these participants stated that they made concerted efforts to review the skin of patients who they felt were at risk of developing a pressure ulcer:

- **Cerys (Deputy Ward Manager):** “I wish I had time to wash all my patients, but I don’t, I’ve got drugs to administer and I’ve got to go on the doctor’s rounds. I pitch in with the patient washes in between different tasks. But if I’m concerned that a patient I am looking after is at risk of a pressure sore, I’m gonna make sure that I wash them, ‘cause I want to see their skin myself.”

- **Cordelia (Senior Staff Nurse):** “We have occasions where we are extremely busy and pressure areas get missed. I’m one of these nurses that even if I’ve got a group of patients to care for, I like to check their bums myself. I mean it’s a bit old fashioned,
but when somebody comes in, one of the things that I do like to do is check their pressure areas (are intact), because I don’t think that you can comment on whether on whether they have got any pressure sores or not if you don’t look at their skin."

The ward based participants’ accounts suggest that the participants did all they could to play an active part in all aspects of pressure ulcer prevention because of the high value that they placed on it, even though they were forced to prioritise other things in clinical practice. The statements made by the clinical nurses also suggest that were unhappy that they are not always able to deliver the standard of skin that they would like to give to their patients.

The participants’ statements about the influence of the prioritisation of bed management and other related interventions on their prioritisation of other aspects of patient care like pressure ulcer prevention are borne out by the findings of other studies.

A US study reported that when nurses were asked to do something by a superior this became their highest priority, even if they felt that something else was more important because someone more senior had asked them to prioritise it (Bowers, Lauring et al. 2001). This study used grounded dimensional analysis to interpret data gathered from staff working in two nursing homes, which limits the extent to which its findings can be generalised. The statements made by the nurses in this US study were objectively verified through researcher observation, which augments the significance of its findings.

A Welsh survey identified that there was a negative correlation between the beliefs of the ward manager and the prevalence of pressure ulcers on patients in their ward (Maylor 1999). This negative correlation was thought to be due to the fact that ward managers with strong convictions about pressure ulcer prevention exerted themselves in a manner that diminished the autonomous decision making of more junior nurses resulting in an increased prevalence of pressure ulcers (Maylor 1999). This assertion appears to be borne out by the findings of this study as the participants maintain that they are compelled to transfer patients by their managers even when they do not think that it is safe to do so. It must be acknowledged that the views of the participants in this study refer to the relationship between bed managers and ward nurses, while Maylor’s (1999) study refers to the influence that ward managers have on the practice of ward nurses. Although there is this slight difference, the findings of this study are supported by the hypothesis from Maylor’s (1999) study that the practice of nurses is influenced by the views of their senior colleagues. There
is nothing inherently bad in senior nurses influencing the practice of junior nurses, but the evidence shows that this influence can have an unexpected impact on the manner in which patient care is delivered; which may be detrimental to patients’ pressure ulcer related outcomes.

So, this study’s findings about the influence of senior nurses on the prioritisation of pressure ulcer prevention by ward nurses are validated by other studies. The evidence from other studies is also consistent with the participants’ statements that pressure from bed managers forces them to prioritise bed management in clinical practice. Perhaps, this pressure from bed managers is due to the chronic shortage of hospital beds in Wales as highlighted in the Jones (2009) report.

The participants’ statements about the impact of bed management and other related interventions on the prioritisation of pressure ulcer prevention are augmented by what is known about the relationship between a person’s values, societo-cultural mores and their actions. Values research shows that the higher the value that an individual places on a specific thing, then the more likely they are to have an active interest it (Hall 1997; Baker 1999). This research has also found that values are such a powerful influence on a person’s attitude and behaviour that a person develops a behavioural pattern that is consistent with their values (Bernard 2002; Bourne 2002). So, the evidence from value studies indicates that there is a relationship between values and attitudes. This in turn suggests that if a nurse places a high value on pressure ulcer prevention, then it is likely that they will be more interested in undertaking interventions to protect the skin integrity of their patients.

The relationship between values, behaviour and attitudes is complex. A number of empirical studies have shown that an individual’s values influence their actions, but in some situations a person’s values and actions are subject to social and cultural conventions (Hebel 1998; Goodwin 2001; Pakizeh 2005). Survey and experimental studies on the link between socio-cultural mores and values report that some values are fluid and can be adapted according to the context in which the individual finds themselves in, for example in an environment where risk avoidance is highly prized then conformity becomes more important than autonomy and tolerance (Hall 1997; Bourne 2002).
This means that in some situations pressure to adhere to societo-cultural mores overrides the person’s own values and determines their actions (Hebel 1998; Bernard 2002). In the majority of these empirical studies the term value refers to the overarching principles which guide an individual’s behaviour like honesty (Goodwin 2001; Allen, Ng et al. 2002). This is different from the value placed on a specific issue like pressure ulcer prevention, but the evidence from these value studies is the best available evidence on values. So, the results of these value studies on societo-cultural mores; values and actions are in line with the evidence in this study which indicates that nurses in clinical practice are under pressure to deliver care in a manner that is congruent with the priorities of their managers and hospital.

The participants’ statements about bed management and other related factors on their prioritisation of pressure ulcer prevention suggest that they are forced to prioritise care in a manner that contravenes their personal values but is consistent with the values of their managers and hospital. The organisational values of the hospitals are cited here because if the bed managers are putting pressure on nurses to prioritise bed management, it is because they have been given a mandate to do so by the hospital. The relationship between the values of the participants, bed managers and the hospitals is evident when one revisits the data that has already been presented about the impact of bed management; the doctors’ ward round and the drug round on the participants’ prioritisation of pressure ulcer prevention. The data in this study also show that the participants value pressure ulcer prevention highly and would like to make it a high priority in their delivery of patient care.

It is possible that there are other aspects of patient care that nurses value highly and would like to prioritise, but there is no evidence in this study that this is the case. This may be due to the fact that this study was primarily focused on the value that nurses place on pressure ulcer prevention. So, one area that merits further exploration in future research is whether there are other aspects of patient care which nurses value highly and would like to make a priority in clinical practice.

The evidence from value studies buttresses the finding from this study that nurses are sometimes pressurised by their peers or superiors to abdicate their own values and prioritise other aspects of nursing above pressure ulcer prevention. The fact that all the participants in this study including senior nurse managers who are in charge of hospital and
community wards and have worked in bed management contend that bed management is the number one priority for nurses in clinical practice suggests that this is a significant finding. This finding is also consistent with the Jones (2009) report which states that the shortage of hospital beds in Wales may also contribute to inappropriate patient transfers as patients have to be discharged as quickly as possible to make way for new admissions. The extent to which this finding about the relationship between bed management and the delivery of patient care applies to other settings is not clear, so this is one avenue that can be explored in future research.

Before moving on, it is important to highlight some of the main points that have emerged thus far. The people that took part in this study stated that they placed a high value on pressure ulcer prevention, but they were compelled to deliver care in a manner that was consistent with the priorities in clinical practice. This sometimes meant that care to maintain their patient’s skin integrity fell down the list of priorities in a manner which contravened the value that they placed on pressure ulcer prevention. This does not mean that they value that they place on pressure ulcer prevention is diminished; it just means that they have to prioritise other things above it in clinical practice. Thus, the participants own values about what they think is important and should be prioritised appear to be superseded by what their manager or institution thinks is important. This appears to be a logical conclusion because all employees are obliged to prioritise their workload as directed by their boss if they intend to keep their job.

This section has considered the impact that clinical priorities have on the manner that pressure ulcer prevention is undertaken by nurses in clinical practice. The next section will explore the other factors which the participants cited as affecting the delivery of care to maintain skin integrity in clinical practice.

3.3 Other factors that can affect pressure ulcer prevention

The participants said that there were other factors that could affect the way in which nurses delivered care to prevent pressure ulcers in clinical practice. The participants also claimed that these factors had more of an impact on the skin care that was delivered by nurses who place a low value on pressure ulcer prevention. This is a contentious assertion because all
the participants who took part in this study placed a high value on pressure ulcer prevention. So, there is no direct evidence which supports the participants’ assertions about the practice of nurses who place a low value on pressure ulcer prevention. Nonetheless, the participants’ statements are worth noting because they highlight a number of factors that affect the prioritisation and delivery of care to maintain skin integrity.

**Routine and ritual**

The participants stated that their colleagues who placed a low value on pressure ulcer were sometimes overly influenced in their prioritisation of nursing tasks by routine and ritual and did not always realise that were free to prioritise care as they saw fit:

**Cerys (Deputy Ward Manager):** “Nurses tend to think in terms of tasks and not people. Every day, I encounter nurses who are sweaty and struggling because they think in terms of tasks and don’t wanna hand over jobs to other nurses. I tell these nurses to pace themselves and prioritise things correctly because I don’t care if somebody is not washed until seven o’clock in the night, as long as they’ve eaten, they’re dry and pain free.”

**Millie (Principal Lecturer):** “Qualified nurses are free to organise their days to suit the need of the patients, and whatever services the patients need. When you challenge the qualified nurses about their organisation, they don’t like it, but they always have time during the day when they are sat down writing, answering the phone or sat in the office. Of course the nurses need to have a break, but they could also find time to give the essentials of nursing care. When you ask qualified nurses what the most important thing in their job is they say that it is getting the documentation right, but their patient could be dead!”

The participants’ assertions about the impact of routine and ritual on the prioritisation of different aspects of nursing are supported by the results of other studies.

The nurses in a US qualitative study said that when they were faced with time pressures they often resorted to strategies which entailed doing the bare minimum that they had to because there was not enough time to get everything done (Bowers, Lauring et al. 2001). The strategies used to deal with time pressures included working to a pre-existing routine and resorting to task orientated nursing (Bowers, Lauring et al. 2001). The researchers in this study verified the participants’ assertions through direct observation, which augments the rigour of its findings. On the other hand, this study was a US grounded dimensional analysis set in two nursing homes; which limits the extent to which its findings can be generalised to other settings. Nonetheless, its findings show that nurses sometimes deliver
patient care according to routine and ritual and overlook the fact that they are free to prioritise care as they see fit.

It must also be noted that the evidence from Bowers, Lauring et al.’s (2001) study suggests that routine and ritual are strategies that are used by nurses who are facing time pressures as they attempt to deliver patient care. The impact of time pressures on the delivery of patient care is also highlighted by the findings of Irurita’s (1996) Australian grounded theory study. This study found that nurses were often forced to prioritise the care that they gave to their patients because there was not always enough time to give patients the highest standard of care, which meant that they gave as little physical care as possible and omitted some aspects of patient care altogether (Irurita 1996). This Australian study has limited generalisability, but its findings are consistent with those of the US qualitative study by Bowers, Lauring et al. (2001). The findings of both these studies suggest that the nurses who are reported to work according to routine and ritual do so because they do not have time to get everything done.

So, there is evidence from other studies which adds credence to the participants’ view that there are nurses who deliver care according to routine and ritual. The evidence from these studies also suggest that nurses deliver care in this manner because they feel that they do not have enough time to deliver all the care that they should deliver. Therefore, further research is needed to establish if the findings of this study with regards to routine, ritual and pressure ulcer prevention. This research could also consider the impact that time pressures have on nurses delivery of care to maintain skin integrity.

**Intervention prestige**

The participants argued that their colleagues’ prioritisation of pressure ulcer prevention was negatively affected by the low value that they placed on pressure ulcer prevention. They felt that their colleagues placed a low value on pressure ulcer prevention because they associated pressure ulcers with older patients:

*Cordelia (Senior Staff Nurse): “Pressure sores are not viewed as sexy, but anything to do with cardiology is sexy because you’re rushing around looking after patients and using things like the Defibrillator. Looking after young patients or people with unusual conditions like Guillain-Barre syndrome is also considered sexy.”*
**Millie (Principal Lecturer):** “Some nurses aspire to be mini doctors and they see the glamorous stuff as being the assessment, the diagnostics and the drug related aspects of patient care. Pressure ulcer prevention is one of those Cinderella things, whose real worth is not always appreciated, even though pressure ulcers cause distress, pain, and are expensive to manage.”

The views expressed by the participants in this study about intervention prestige appear to be supported by research evidence and expert opinion.

The notion that pressure ulcer prevention is undervalued by the government and society, has been expressed by tissue viability researchers like Butler (2008) and Cherry (2006). One view is that pressure ulcers have a lower public profile than other medical conditions, so their prevention is perceived to be less important (Cherry 2006). This view augments the participants’ statements that different healthcare issues and their associated nursing interventions have a different level of prestige attached to them. An alternative view is that healthcare issues like pressure ulcer prevention are often overlooked because they affect the vulnerable in society, people without any political authority or healthcare professionals without any influence (Butler 2008). This view bolsters the participants’ assertion that pressure ulcers and their prevention are not very prestigious aspects of nursing because they affect the elderly and vulnerable.

There are other similarities between the views expressed by tissue viability researchers and the participants in this study. All of the participants in this study described pressure ulcer prevention as an issue that was undervalued and one participant described it as a “Cinderella” topic. The term “Cinderella” in one that is also highlighted by Butler (2008) who contends that this colloquial term is used somewhat pejoratively to refer to the aspects of healthcare that tend to affect the vulnerable in society. This suggests that pressure ulcer prevention may be undervalued because of the types of patients that tend to develop pressure ulcers.

The participants’ views about the impact of intervention prestige on pressure ulcer prevention are also supported by the evidence from nursing studies. One nurse education study found that the pressures in clinical practice may have inadvertently resulted in the division of different aspects of nursing care according to their perceived priority (Allan and Smith 2009). The findings of this qualitative study suggest that the technical and
organisational aspects of patient care which tend to be delivered by nurses have acquired a high status, while the hands-on aspects of patient care that are predominantly delivered by nursing auxiliaries have a low status (Allan and Smith 2009). The extent which the findings of this nurse education study can be applied to other settings is also limited by the fact that it was a qualitative study. Despite this, the evidence from this nurse education study bolsters the view that pressure ulcer prevention is undervalued. It also buttresses the participants’ assertion that nurses who place a low value on pressure ulcer prevention are less inclined to take part in the delivery of care to maintain their patients’ skin integrity. This is because interventions to maintain skin integrity are predominantly hands-on and can be delegated to students and nursing auxiliaries.

The differential prestige of nursing interventions has also been alluded to in the debate about the role that nurses should play in the care of their patients. The perception that there are some nurses who are reluctant to take part in the hands-on care of their patients has been debated in the media, opinion papers and even at a RCN congress (Scott 2004; Griffiths 2008). Some of the views in this debate have implied that the physical aspects of nursing care are so elementary that they do not require any education or intelligence (Scott 2004; Allen and Lyne 2006). The implied relationship between intellect and the delivery of physical nursing care is open to question, but it lends itself to the participants’ views that pressure ulcer prevention is undervalued by some nurses as large part of it involves the delivery of hands-on nursing care.

The participants’ sentiments about the intervention prestige are also consistent with what is known about values. Robust values studies have found that a person’s values can be influenced by the society and culture that they live in (Goodwin 2001; Pakizeh 2005). These studies also report that the personal values of the members of a given society are a reflection of the values that are prized by that society (Koerner 1993; Mayton, Ball-Rokeach et al. 1994; Bourne 2002). This means that if pressure ulcer prevention is deemed to be less prestigious than other aspects of nursing by society, then it is likely that some nurses will place a low value on pressure ulcer prevention. Therefore, the evidence from values research supports the participants’ view that there are some nurses who place a low value on pressure ulcer prevention because it is perceived to be less prestigious as other aspects of nursing.
The findings of this study with regards to intervention prestige and the value placed on pressure ulcer prevention are congruent with the results of other studies and expert opinion. Nonetheless, the participants’ accounts about the differential prestige of nursing interventions and the value placed on pressure ulcer prevention are not directly validated by any evidence. So, further research on this topic is required to establish the extent to which the findings of this study can be applied to other settings.

Professional recognition

The participants intimated that the low value and prioritisation placed on pressure ulcer prevention by their colleagues was due to a lack of professional recognition for nurses that are adept at delivering hands-on nursing care. The student and junior nurse participants in this study said that senior nurses did not consider the amount of time that a nurse spent on direct patient care but focused more on their qualifications and verbal skills when they considered candidates for promotion. On the other hand, the ward managers; senior nurses and principal lecturer were adamant that delivering hands-on patient care was more important than qualifications to a nurse’s promotion prospects:

Joanne (3rd year student): “A nurse’s ability to give basic nursing care to their patients doesn’t really matter when it comes to promotion, what matters is doing courses. It’s obvious that if you’ve done more studying it looks good on your C.V. because educational courses keep you up to date with the latest knowledge. The person doing five courses a year looks better to the management than the one who does nothing, because they seem more motivated.”

Gladys (Deputy Ward Manager): “(When assessing candidates for promotion) we look at things like hand washing, cleanliness, communication skills, appearance and time spent with the patient and their relatives. I know some people want to do anything other than look after the patients, but you don’t push yourself up the ladder by doing flashy courses. The nurses who will do anything to avoid putting their hands on patients are best moved on into another area.”

Michelle (Ward Manager): “Some nurses think that if you want to get promoted then you should focus on going on different courses, but I just don’t agree with that. I’ve seen people in the Trust who’ve done loads and loads of courses and I wouldn’t want them to look after my family. Nursing is about basic nursing care and looking after patients. You can have six degrees, but be an absolutely crap nurse!”

The relationship between professional recognition and a nurse’s motivation to deliver care pertaining to an aspect of nursing care like pressure ulcer prevention has not been previously identified in any other research or theories. Despite this, it is logical that a person
will focus on the aspects of their job which provide the greatest opportunity for career advancement if they intend to progress in their career. This means that the participants’ views about the impact of professional recognition on the value placed on pressure ulcer prevention are only underpinned by simple logic at present.

It is more challenging to explain why there is a difference in the views that are put forward by the students and junior nurses on one hand and the ward managers and senior nurses in this study about what is considered when it comes to promotion. The simplest explanation for these different views on professional recognition is that the two groups of nurses in this study have different perceptions of what aspects of nursing are viewed as being important by more senior colleagues. The difference in the opinions of the two groups of participants may seem innocuous, but it is worth noting as it may explain why there are differences in the manner in which nurses are reported to prioritise pressure ulcer prevention.

Although the participants expressed different views about the aspects of nursing that merit professional recognition, they all agreed that there are some nurses who are more focused on gaining qualifications than delivering care to their patients. There may indeed be some nurses who are more interested in advancing their careers than patient care, but the participants’ accounts are not supported by any direct or indirect evidence from other studies. Consequently, there may be other reasons that explain why the participants felt that there were some nurses who were more interested in career advancement than patient care.

One explanation is that the participants in this study have encountered a minority of nurses who were primarily interested in career advancement, but these nurses made such an impression on the participants that they readily came to mind when the participants were being interviewed in this study. It is also possible that the participants have at some point in their careers seen other nurses being promoted who they felt were only promoted because of their qualifications, which led them to conclude that these nurses who were promoted had focused on their own career advancement and had not put a similar amount of effort into the patient care that they delivered.

An alternative explanation is that the participants have observed some nurses being promoted over their colleagues because of their qualifications as all the candidates for
promotion were equally adept at delivering patient care. This may have led to some of the
participants mistakenly concluding that qualifications were considered to be more
important than the delivery of patient care by senior nurses when candidates are being
considered for promotion.

Regardless of the view that is adopted with regards to the participants’ accounts, it is
possible for nurses to gain qualifications, deliver high quality patient care and advance their
careers. Given the wide range of potential explanations for the participants’ accounts,
perhaps it is more important to focus on the fact all the participants felt that the delivery of
high quality patient care was the most important part of a nurse’s job and that everything
else was of secondary importance. To this end, it is particularly poignant that the nurses in
managerial positions feel so strongly about the delivery of high quality care to patients that
they maintain that they would not want to work with nurses who are more interested in
attaining qualifications advancing their careers at the expense of patient care.

The views expressed by the participants are also augmented by the evidence in the previous
section on intervention prestige. In other words, if junior nurses perceive some aspects of
nursing like the acquisition of qualifications to be important when it comes to promotion;
then it makes sense for them to focus on those things if they want to be promoted. The
evidence that is presented in this section also indicates that perceptions are also a powerful
influence on the way that nurses behave especially on the aspects of nursing that are
construed to be fundamental like pressure ulcer prevention. The nurses’ perceptions about
professional recognition may or may not be accurate, but what appears to be important is
the impact that these perceptions have on nurses’ pressure ulcer related attitude and
behaviour and not the veracity of their perceptions. Given the lack of evidence on this topic,
further research that explores the relationship between professional recognition and the
value that nurses place on pressure ulcer prevention and its prioritisation is needed.

Fitting in with the ward philosophy

The participants maintained that nurses’ prioritisation of pressure ulcer prevention could
also be influenced by a desire to fit in with the culture of a clinical setting. Fitting into the
culture of a ward was said to be important to nurses because those who did not fit in to the prevailing culture were often subjected to criticism and eventually decided to leave. The desire to conform to the ward culture was felt to be particularly strong amongst junior nurses as they did not want to rock the boat and went along with the prevailing ethos of the ward:

**Joanne (3rd year student):** “Any nurses that come onto the ward and have a different way of doing things to the majority of nursing staff tend to move on after a couple of months. If you work with that nurse you soon realise that they don’t work the same way that you work, like if you wanna make sure that a patient gets the area in between their toes washed and dried properly, they’ll be rushing to change the patient’s bedding. You also get negative comments about them from other members of staff that they are not doing things in the right way. That nurse probably gets sick of people saying that they are doing things the wrong way and decide to get out of here!”

**Michelle (Ward Manager):** “When you’re a junior nurse you don’t question things, you just do what everybody tells you to do. You don’t take on the responsibility to make your own decisions, because you’re afraid of stepping on someone’s toes. You wanna fit into a team, so if you’re a student or just qualified as a nurse you can’t go to an area and suddenly make changes.”

The participants also asserted that having a shared ward philosophy was important to the delivery of a high quality care and the nurses that did not meet these standards were asked to move on:

**Gladys (Deputy Ward Manager):** “Everyone here is aware that the patient comes first and whatever the patient’s needs are, they need to be attended to. A lot of nurses have only ever worked on our ward. A lot of students come back to work on the ward when they qualify because they all like the high standard of care we give to patients. We’ve handpicked our auxiliaries and trained them up so I think that everyone is aboard with good quality care. We’ve had agency nurses coming in the past with different standards of care and we’ve politely asked them not to come back.”

The participants’ statements about the impact of fitting in with the ward philosophy on nurses’ prioritisation and delivery of patient care as well as their inclination to work in a given setting are supported by some evidence from other studies.

The impact of a desire to fit in with the ward culture on a nurse’s practice is supported by the research on values. Value studies report that people have greater job satisfaction when their personal values are congruent with those of their employer and the role that they are
asked to perform especially in nursing (Koerner 1993; Goodwin 2001). Research on values has also shown that when there is a conflict between the values of the individual and their job, either person alters their values to suit their job or the individual seeks another job that is more consistent with their own values (Pearcey 2004; Crumbie 2005). The evidence from these studies also suggests that it is important that the people working in an organisation or profession have a shared sense of values because of the impact that value congruence has on job satisfaction (Bernard 2002; Bourne 2002). These value studies have largely focused on the overarching values that people have rather than the value that they place on a specific issue, but their results support the view that a desire to fit in can influence the manner in which nurses prioritise and deliver patient care. The evidence from these value studies also bolsters the participants’ statements that any nurses who arrived on a ward either had to adapt the practice to fit in with the culture of the ward, or choose to go and work somewhere else.

The relationship between fitting in and the prioritisation of patient care like pressure ulcer prevention has not been examined in any nursing or tissue viability research. It could be argued that the importance of a shared set of values is implicit in documents that underpin nursing practice like the Code of Conduct for nurses in the UK (NMC 2008b), because they set out the standards that all nurses are expected to uphold. The evidence from value studies indirectly buttresses the participants’ accounts about the impact that a nurse’s desire to fit in can have on their prioritisation and delivery of nursing care. This suggests that the relationship between a nurse’s desire to fit in and their prioritisation of pressure ulcer prevention is a previously unreported finding of this study. Therefore, further research is needed to clarify the exact nature of the relationship between a nurse’s desire to fit in and their prioritisation of different aspects of patient care like pressure ulcer prevention.

3.3.1 Impact of these factors on patient care

The participants in this study argued that routine and ritual, intervention prestige, professional recognition and a desire to fit in had a greater impact on the prioritisation and delivery of skin care by nurses who place a low value on pressure ulcer prevention. This is a point that is open to question because everyone that took part in this study placed a high value on pressure ulcer prevention. Therefore, it is important to examine more closely why
the participants maintained that some factors had more of an impact on the manner in which they prioritised and delivered skin care.

The participants said that manner in which they delivered care to prevent pressure ulcers was often influenced by the clinical priorities that were set by their managers. Conversely, they argued that their prioritisation of care to maintain skin integrity was not affected by any of the factors that were discussed in the last section of this chapter. These assertions are not directly validated by any objective evidence or evidence from other studies. Despite this, the results of values research offer a viable explanation for this apparent paradox about the impact of clinical priorities and other factors on nurses’ delivery of care to prevent pressure ulcers.

The participants’ statements about the impact of clinical priorities and the aforementioned factors on the manner in which they deliver skin care are consistent with what is known about the relationship between a person’s values and actions. Research studies have shown that a person’s values are often arranged in hierarchy of importance that is used to guide their behaviour (Koerner 1993; Kulig 2006). Value studies have also shown that there are some factors which do not affect people’s behaviour because some people are not prepared to compromise on some of their personal values (Hebel 1998; Bourne 2002). This suggests that pressure ulcer prevention may be less important to the participants than delivering care in line with the clinical priorities set by their superiors, but it is more important than delivering care in line with the other factors that can affect the prioritisation of patient care. This evidence from value studies also explains why factors like routine and ritual may not affect the manner in which the participants deliver skin care to their patients.

The participants’ accounts about the impact of clinical priorities and other factors on their attempts to deliver skin care that is consistent with their value of pressure ulcer prevention are augmented by the evidence from studies in other ways. Survey and experimental studies report that some values are fluid and can be adapted according to the context in which the individual finds themselves in, for example as a person who values honesty may not tell the truth in a situation where being honest may have negative repercussions (Hebel 1998; Bourne 2002; Pakizeh 2005). It has also been shown that people often abdicate values like autonomy and tolerance when they find themselves in an environment where risk
avoidance is highly prized (Bourne 2002; Pakizeh 2005). This means that in some situations the pressure to adhere to conform to societal norms and values can override the person’s own values (Hall 1997; Bernard 2002). The participants’ accounts indicate that they worked in an environment that prized the delivery of care according to a set of clinical priorities. So, it makes sense that the participants’ ability to deliver skin care that is consistent with the value that they place on pressure ulcer prevention would be affected by these clinical priorities.

The participants’ statements about the impact of clinical priorities and other factors and the manner in which the deliver skin care are supported by the results of research on values. However, it is difficult to make any definitive statements about the practice of nurses who place a low value on pressure ulcer prevention as no such nurses took part in this study. There is no other evidence from research in any other field which offers a tenable hypothesis for the manner in which clinical priorities and other factors are said to affect the participants’ practice. Therefore, further research that examines the impact of clinical priorities and other factors like professional recognition on the delivery of care to prevent pressure ulcers is urgently needed.

This future research would also help to clarify the extent to which the findings of this study can be applied to other settings especially with regards to the practice of nurses who place a low value on pressure ulcer prevention. This is important because the practice of nurses with a low value of pressure ulcer prevention is solely predicated on the accounts of the participants in this study.

The last section has explored other factors that can affect the prioritisation and delivery of care to maintain skin integrity in clinical practice, the following section will examine the skin care that the participants said that they delivered to their patients in clinical practice.

### 3.4 Care delivery in practice

The ward based participants conceded that clinical priorities like bed management meant that they were not always able to directly participate in the delivery of care to maintain their patients’ skin integrity. These participants said that they relied on nursing auxiliaries and students to assess the skin and deliver the skin care for most of their patients, especially
the patients who had not been identified as being at risk of developing pressure ulcers. The clinical participants maintained that they were happy to delegate skin care to the nursing auxiliaries and students because they had been taught about the signs of skin disintegration that they needed to look out for:

**Gladys (Deputy Ward Manager):** “The auxiliaries are taught that if they see ANY skin discolouration, cuts, bruises or anything untoward on a patient’s skin when they are doing blanket baths or changing a patient’s position they should speak to a qualified nurse. So if there’s a problem it will be picked up.”

**Joanne (3rd year student):** “The nurses highlight the importance of preventing pressure sores to the N.A.’s (nursing auxiliaries) because they do a lot of the patient washes. If a N.A. (nursing auxiliary) discovers any problems with the patient’s skin they report it to the qualified nurse. Then the qualified nurse decides what action should be taken.”

The participants’ accounts indicate that the skin care for most of the patients on a ward is delivered by nursing auxiliaries and students because of the other demands on a nurse’s time in clinical practice. The clinical participants also stated that when the nursing auxiliaries and students raised concerns about a patient’s skin, not all of the nurses bothered to review the patient’s skin for themselves:

**Cerys (Deputy Ward Manager):** “I rely on the nursing auxiliaries to say come and have a look at this, if they have concerns about a patient’s skin. I am available to go and (have a) look and address the problem. I rely on the nursing auxiliaries because they are knowledgeable and they’ve got these enhanced roles in different areas. But I think you’ll always get some nurses who see things differently from me.”

**Leah (2nd year student):** “The nurses miss out on seeing the patient and rely on the nursing auxiliaries to keep them informed about the state of the patients’ skin. Sometimes the qualified nurse doesn’t actually see their patient, so they don’t know if their patient has a pressure ulcer unless the nursing auxiliary tells them. I’ve done it loads of times, you turn a patient, and you see they’ve got a mild or worsening pressure ulcer. When you ask the qualified (nurse) to have a look at the patient’s skin, the nurse just says: oh, just pop a dressing on it.”

The assertion by the ward based participants that they are unable to directly take part in the skin assessment and the delivery of interventions to prevent ulcers for all of their patients resonates with the findings of nursing studies.

Nurses who took part in an Australian grounded theory study said that when they were under pressure to get a lot of things done, they avoided taking part in the delivery of
physical nursing care to their patients because they viewed other aspects of nursing as a greater priority (Irurita 1996). This is similar to the finding in this study that the pressure to prioritise bed management and other related issues makes it difficult for nurses to fully participate in all aspects of the skin care of their patients. A US grounded dimensional analysis study reported that one of the major influences on nurses’ prioritisation of different aspects of healthcare was what their superiors wanted done (Bowers, Lauring et al. 2001). Both of these studies used qualitative research methods and were set in different countries, which limit the extent to which they can be applied to other settings. Nonetheless, the findings of these studies show that the prioritisation and delivery of patient care by nurses is subject to other factors in clinical practice. Therefore, the findings of these studies are also congruent with the evidence in this study which shows that nurses are not always able to participate in the delivery of care to prevent pressure ulcers, because they have to see to other aspects of patient care which they are forced to prioritise.

The lack of nurse participation in interventions to maintain skin integrity has also been highlighted in tissue viability research. An observational study identified that the majority of skin care in clinical practice was delivered by students and nursing auxiliaries and the nurses that were looking after these patients were not even in the same bay as their patients for long periods of time (Young, Williams et al. 2004). This finding which was obtained through direct observation augments the statements made by nurses in this study that the majority of skin assessments and interventions to prevent pressure ulcers in clinical practice are often undertaken by nursing auxiliaries and students. The finding that nurses do not deliver most of the skin care to their patients in Young, Williams et al.’s (2004) study was inadvertent because its primary objective was to define the interventions nurses undertook to maintain the skin integrity of their patients.

The fact that the nurses in Young, Williams et al.’s (2004) study were not even in the same bay as their patients most of the time when they knew that they were being observed raises a number of questions about nurses’ prioritisation and delivery of skin care in clinical practice. The findings of this observational study also validate this study’s finding that most of the care to prevent pressure ulcers is delegated to nursing auxiliaries and students because the nurses are busy with other things, even when they place a high value on pressure ulcer prevention. By the same token, the findings of this study about nurses
prioritisation of care to maintain skin integrity provide a viable explanation for the skin care practices that were observed in Young, Williams et al.’s (2004) study.

The fact that the clinical participants in this study concede that they do not take part in many aspects of pressure ulcer prevention also provides an explanation for the findings of other studies. Studies that have examined different aspects of tissue viability report that poor and inaccurate pressure ulcer related nursing documentation is prevalent in clinical practice (Gunningberg and Ehrenberg 2004; Moore and Price 2004; Jordan-O’Brien and Cowman 2011). The findings of this study suggest that the reported paucity of pressure ulcer nursing documentation is due to the fact that nurses are not directly involved in many aspects of pressure ulcer prevention and so are unable to accurately document the skin care that their patients receive.

So, the findings of this study with regards to nurses’ prioritisation and participation in interventions to prevent pressure ulcers are supported by the results of other studies. Nonetheless, the participants’ claims that they are more proactive and do more to prevent pressure ulcers than their colleagues who place a low value on pressure ulcer prevention require further scrutiny and investigation for a number of reasons.

Firstly, the practice of nurses who place a low value on pressure ulcer prevention is based on indirect evidence from the participants as no nurses who place low value on pressure ulcer prevention took part in this study. Secondly, the participants in this study admitted that they delegated many aspects of pressure ulcer prevention; even though they placed a high value on it because they were busy with other things. Therefore, future research must focus on the manner in which nurses who place a low value on pressure ulcer prevention prioritise and deliver care to maintain their patients’ skin integrity. This would provide direct evidence about the manner in which these nurses deliver care to prevent pressure ulcers, which would overcome one of the limitations of this study. If this type of research were to be undertaken, it would also help to establish the extent to which the differences between the practice of nurses with a high and a low value of pressure ulcer prevention which are highlighted in this study apply to nurses in other settings.
3.4.1 The role of nursing auxiliaries

All the participants stated that they were very uncomfortable that nursing auxiliaries reviewed the patient’s skin most of the time, while the responsibility for maintaining the patient’s skin integrity lay with the qualified nurse. The non-clinical nurses argued that further clarification about the roles of nurses and nursing auxiliaries in skin care was needed from regulatory authorities was required to ensure that patients received the best care. The non-clinical nurses also maintained that the only sensible solution to this disconnect between care delivery and responsibility was to have a nurse whose only job was to deliver hands-on nursing care like pressure ulcer prevention:

**Darlene (Senior Nurse Manager):** “We need to be clear about what we expect from nursing auxiliaries because they are the ones delivering the pressure area care. So if the nursing auxiliaries see signs of a pressure ulcer developing like redness of the skin, what do they do about it? There ought to be clear guidelines about the nursing auxiliaries’ role in pressure area care that are implemented uniformly throughout the Trust. If the nursing auxiliaries have concerns about a patient’s skin, it needs to be clear where they can take those concerns to.”

**Millie (Principal Lecturer):** “I am concerned by the amount of care that is not given by qualified nurses and we are now at that point where the boundaries between unqualified and qualified nurses are being blurred. If care is given by a whole team of nurses, then healthcare assistants are just as important a part of the team as qualified nurses. But this has led to the debate about whether we are creating a two nursing tier system again, like the old SRN (State Registered Nurse) and enrolled nurse that used to exist (until 1986).”

The non-clinical participants in this study felt that further clarification of the role of nursing auxiliaries with regards to pressure ulcer prevention was needed from regulatory authorities. This seems a bit strange because the professional guidelines for nursing state that nurses are responsible for all aspects of patient care, but they are allowed to delegate some aspects of patient care provided that the person delivering the care is competent and is adequately supervised (NMC 2008a; 2008b). This means that nurses are obliged to oversee all the nursing care that patients receive to ensure that they receive the highest standard of care possible (NMC 2008a). Therefore, it is clear that if the nursing auxiliaries have any concerns about a patient’s skin then they should highlight their concerns to the nurse who is looking after that patient.

Closer inspection of the accounts of the non-clinical participants in this study shows that the
senior nurse managers are aware that the majority of skin care in clinical practice is delivered by nursing auxiliaries and students. This partially verifies the accounts of the clinical nurses in this study who state that they do not take part in the skin care of their patients because they are under pressure to prioritise other aspects of nursing. This does not recuse the ward based participants of responsibility for the decisions that they make about the skin care of their patients, as all nurses are accountable for all aspects of the nursing care of their patients (NMC 2008b). It must also be noted that clinical nurses in this study like any other employees are also accountable to their senior colleagues such as line managers. This means that it is possible that their decision making is influenced by the decisions made by their senior colleagues, but ultimately each nurse is accountable for any decision that they make with regards to the care of their patients.

The views expressed by the non-clinical nurses in this section appear to contradict some of the statements that they made about the impact of clinical priorities on the skin care delivered by nurses. Some of the non-clinical participants stated that clinical priorities like the drug round should not prevent nurses from taking part in the skin care of their patients, but in this section they concede nurses do not deliver the majority of skin care to their patients. Perhaps, the non-clinical nurses felt that their ward based colleagues were coming up with excuses for not playing a greater role in care to maintain their patients’ skin integrity. It is also possible that the non-clinical participants felt that the nurses could prioritise their work load in a different way in order to enable them to play a greater role in the prevention of pressure ulcers. In the absence of any other evidence, the clinical participants’ view that they are under pressure to prioritise other things above participating in care to maintain skin integrity appears to be a viable explanation. This does not discount the possibility that there may be another reason why skin care is prioritised in the manner that it is by the nurses in clinical practice that was not identified in this study. Whatever the case may be, the participants’ accounts of the prioritisation of care to prevent pressure ulcers merit further examination in subsequent research to ascertain if similar views are held by clinical and non-clinical nurses working in other settings.

The other salient point that emerges from the data in this section is that the non-clinical nurses feel that nursing auxiliaries should not be delivering the majority of skin care and perhaps should be replaced with State Registered Nurses. The non-clinical participants’
statements intimate that they feel that nursing auxiliaries are not appropriately qualified to be undertaking the lead role in delivery of care to prevent pressure ulcers. This contradicts the view of the clinical nurses who feel that nursing auxiliaries are appropriately trained to deliver interventions to maintain their patients’ skin integrity. Therefore, further scientific enquiry is needed to establish if the disconnect between the views of clinical and non-clinical nurses in this study about the competence of nursing auxiliaries applies to other settings. This is particularly important because this disparity in the views of the role that nursing auxiliaries should play in pressure ulcer prevention has not been previously highlighted in any other study.

All the participants in this study concurred that the majority of skin care in clinical practice is not given by nurses. They pointed out that that nurses are permitted to delegate some aspects of patient care like pressure ulcer prevention care to nursing auxiliaries, but they needed to be more aware of their legal responsibility to the patient in terms of the pressure ulcer prevention care that is given:

**Cerys (Deputy Ward Manager):** “All registered nurses should be aware of the legal consequences of pressure sores because the patient’s got the right to have first-class treatment. If you don’t put the right dressing on or give the wrong treatment that patient could lose their limb. When some nurses are dressing a wound they just pick any dressing because they think that as long as the wound is dressed then its job done! Because when you ask them their rationale for using wrong dressings they say cause so and so had also put it on there. But what did the care plan say? These nurses don’t understand the damage that they can do to the patient by using the wrong dressings. They need to focus on the patient as a person with regards to wound healing, rather than just focusing on putting on a dressing and moving onto the next patient!”

**Millie (Principal Lecturer):** “We can only advise qualified nurses about what the law says, but whether they uphold the right of the patient or not in clinical areas is down to them and their personal professional standards. Qualified nurses are there to delegate care appropriately and to lead the nursing team. But as a qualified nurse, you should want to see the patient’s skin to check if it is changing, ensure that patient is eating and is hydrated appropriately and to make sure that the manual handling techniques are adhered to when those patients are repositioned. I have no objection to unqualified nurses doing things; but there are things that I would expect a qualified nurse to do, like seeing the patient’s skin, particularly in areas that are at risk of pressure ulcer like bony prominences and buttocks.”

The participants’ statements about the responsibility of a nurse with regards to the skin care of their patients are line with the latest guidance from the NMC. Nurses are allowed to
delegate some aspects of patient care provided to the nursing auxiliaries and students as long as they are qualified to deliver care and are supervised, but nurses retain responsibility for all aspects of patient care (NMC 2008a; 2008b).

The participants’ accounts also suggest that nurses could be made more aware of their responsibilities with regards to pressure ulcer prevention, but the onus to obey the professional guidance on patient care lies with each individual nurse. These assertions are supported by simple logic. This is because logic dictates that a programme of education makes people more aware about a given topic. There is however, a vast difference between knowing what the right thing to do is, and actually doing it.

3.4.2 Pressure ulcer related nursing documentation

The participants stated that clinical priorities and other factors affected the skin care that patients received in other ways. The participants argued that many of their nursing peers did not complete their patients’ pressure ulcer related documentation correctly. The participants felt that this poor documentation had a negative impact on pressure ulcer prevention, especially when patients were transferred between settings; because it compromised the continuity of care. Although the participants in this study expressed the same views about poor nursing documentation, the most vivid accounts were given by senior nurse managers:

**Julia (Senior Nurse Manager):** “There is poor assessment, evaluation and completion of documentation on all fronts of nursing care, especially in acute areas. Poor nursing documentation is not unique to pressure ulcers. I guess that the problems preventing nurses from keeping their documentation up to date are things like the skill mix of the nursing staff and the overall staffing levels.”

**Mia (Senior Nurse Manager):** “A recent change in policy has placed more emphasis on documentation for pressure relief, because a pressure ulcer can now trigger a POVA. Since the new policy came in about pressure ulcers triggering a POVA, proper nursing documentation has become a necessity. We should have the same documentation because our nurses rotate in different settings, but care plans should always be tailored for the needs of the individual patient.”

The participants’ accounts were confirmed by the fact that a number of incidents of poor nursing documentation pertaining to fundamental aspects of patient care like pressure ulcer prevention had been identified in the Trust before this study was undertaken. These incidents had resulted in the implementation of a new policy on nursing documentation in
the participants’ clinical areas at the time this study was undertaken. This policy had been in place for over a year when this study was undertaken, but the participants’ accounts raise questions about the implementation and effectiveness of this policy as they indicate that the pressure ulcer related nursing documentation for patients on the wards was still poor.

Perhaps, the continued prevalence of poor skin care related documentation is due to the fact that nurses are too busy doing other things to keep their patient’s documentation up to date. This is a distinct possibility given the participants’ accounts that they are forced to prioritise other things above pressure ulcer prevention in clinical practice. The participants in this study concede that most of their patients’ skin care is given by students and nursing auxiliaries. Therefore, nurses may be unable to accurately complete their patient’s pressure ulcer related documentation because they have not been directly involved in the delivery of the concomitant care.

The participants maintain that the value that a nurse places on pressure ulcer prevention influences the manner in which they prioritise and deliver skin care. This raises the possibility that poor documentation of care to maintain skin integrity is still rife because some nurses place a low value on pressure ulcer prevention and ensuring that pressure ulcer prevention related documentation up to date is a low priority. This is a view that must be adopted with caution because no nurses with a low value of pressure prevention took part in this study.

Regardless of the view that one chooses to adopt, further research is needed to ascertain why poor pressure ulcer related nursing documentation is said to be rife despite the implementation of a new policy on nursing documentation. This is important because the researcher did not directly review the nursing documentation pertaining to the maintenance of skin integrity in hospitals that took part in this study. Reviewing the pressure ulcers related documentation of all the patients from clinical areas in 14 different hospitals as well as undertaking the study was a challenge that was too great for the lone researcher. Some may argue that the researcher could have reviewed a selected sample of the pressure ulcer related documentation from the participants’ wards, but this would have raised a number of challenges that would have made it difficult for the researcher to complete this study within the given time frame. One such challenge would have been
getting research and ethical approval to review patients’ pressure ulcer documentation from the relevant research governance bodies, as this permission had not been sought at the onset of the study.

The participants’ views about the prevalence of poor pressure ulcer related nursing documentation are augmented by evidence from other studies. A Swedish cross sectional survey of retrospective audits identified that there were a number of shortcomings in the pressure ulcer related nursing documentation of 413 hospitalised patients (Gunningberg and Ehrenberg 2004). These shortcomings included the omission of a recognised pressure ulcer grading scale, poor pressure ulcer risk assessment and no clear statements about the measures taken to protect the patients’ skin (Gunningberg and Ehrenberg 2004). The nursing documentation of pressure ulcers in this study was found to be so poor that the physical inspection of the skin of 357 patients identified 60 patients with undocumented pressure ulcers (Gunningberg and Ehrenberg 2004).

It is possible that information about patients with pressure ulcers was shared amongst nurses in this survey, and pressure ulcer related care was given to patients without being documented. It is difficult to ascertain if this was the case because the researchers in this survey only reviewed the patients’ notes and physically reviewed their skin. Nonetheless, the findings of this study augment the participants view that poor pressure ulcer related nursing documentation is prevalent in clinical practice.

The pressure ulcer related nursing documentation was also found to be poor in an Irish survey where the nurses expressed a positive attitude towards pressure ulcer prevention (Moore and Price 2004). The nurses in this study conceded that they did not take part in care to protect the patient’s skin even though they completed their pressure ulcer prevention care plans (Moore and Price 2004). The findings of this study augment the participants’ view that poor pressure ulcer related nursing documentation is prevalent in clinical practice. The results of this survey also lend themselves to the idea that poor pressure ulcer related nursing documentation is rife because nurses are either too busy doing other things to take part in pressure ulcer prevention, or they think that pressure ulcer prevention is a low priority.
These surveys have their limitations, but the fact that two surveys with different research methods undertaken in different settings report that poor pressure ulcer related nursing documentation was rife in clinical practice adds credence to the participants’ assertions. These surveys bolster the participants’ view do not always maintain accurate and up to date pressure ulcer related documentation about their patients.

The participants also had other concerns about variations in the documentation of care to maintain skin integrity in clinical practice. The participants said the care plans that were used to document skin care varied between settings even though the same care plans were supposed to be used throughout the Trust to ensure continuity of care. The participants maintained that the use of turn charts to document the frequency of patient repositioning (which helps to prevent pressure ulcers) varied tremendously between different settings. Some of the participants used turn charts in the care of all their patients because they viewed it as an integral part of pressure ulcer prevention. Other participants felt that turn charts should only be used when a patient was at risk of developing a pressure ulcer. A small number of participants felt that turn charts should only be used when a patient had a pressure ulcer:

**Leah (2nd year student):** “If there is any form of pressure damage on the patient’s skin, they are automatically put onto a turn chart and repositioned regularly.”

**Mia (Senior Nurse Manager):** “The use of turn charts should be determined by patient need and they should be used for patients at risk of developing pressure ulcers.”

**Michelle (Ward Manager):** “We make sure all the patients are always on turn charts irrespective of what their mobility is like. Some of the nurses that I lost when we were downsized have found it difficult to work on their new wards because they don’t even use turn charts on patients with pressure sores. The turn chart is part of a legal document of care and surely every patient should be on one!”

It is not clear why the participants in this study have such different views about the merits of using turn charts and there are a number of possible explanations. The differences in the use of turn might be due to differences in the clinical decision making of nurses working in different settings. This is a view that this is open to question as all the participants in this study worked for the same Trust and were expected to adhere to the same policy on documentation.
The reported variations in the use of turn charts might also be due to the fact that nurses have their different opinions about the efficacy of using this particular document in the prevention of pressure ulcers. This in turn raises the possibility that nurses do not maintain contemporaneous and accurate pressure ulcer related documentation because they perceive some aspects of this documentation to be of limited value in maintaining their patients’ skin integrity. The pressure ulcer related nursing documentation on the participants’ wards was not inspected to confirm the accuracy of the participants’ statements about the variations in the use of turn charts in different settings for reasons that have already been stated. Nonetheless, some of the participants’ accounts indicate that they feel that some aspects of documentation that they are expected to keep up to date are not always appropriate.

This finding merits further investigation to ascertain if nurses working in other settings have any reservations about the pressure ulcer related documentation that they are expected to keep updated. Further research is also needed to establish if there are similar variations in the documentation pertaining to the maintenance of skin integrity that is used on different wards in other NHS Trusts.

3.5 Values, other issues and care delivery

The participants stated that even when they were able to participate in care to protect their patient’s skin there were other issues in clinical practice which affected their ability to deliver skin care that was consistent with their values. The issues that were identified by the participants related to support from the multidisciplinary team (MDT) and resource provision, which are explored in the next few sections.

3.5.1 Support from the MDT

All nurses are expected to be able to prevent and manage pressure ulcers as a result of the education that they receive on maintaining skin integrity during their training. However, there are occasions when nurses in clinical practice require advice and support on how to prevent or manage pressure ulcers from other healthcare professionals in the MDT. The statements made by the participants in this study highlighted the fact that the advice and
support that nurses in clinical practice receive from other members of the MDT to prevent and manage pressure ulcers varies tremendously.

**Support from the dietician**

All the participants said that they had a very good relationship with the dietician who they felt was very helpful in addressing the nutritional aspects of pressure ulcer prevention and management:

**Michelle (Ward Manager):** “We have close links with the dietician who is on the ward every day. If a patient’s nutrition is compromised in any way shape or form, we intervene with calorie supplements to augment their diet or if they’re not taking enough oral nutrition we intervene with a naso-gastric tube.”

The dietician is an important member of the MDT with regards to pressure ulcer prevention because they help to ensure that the patient receives sufficient nutrition to overcome their illness and maintain their skin integrity. The provision of adequate nutrition is particularly important for patients who are malnourished because they are at high risk of developing pressure ulcers. Therefore, the participants’ accounts indicate that dieticians are fulfilling the principles of the guidelines on pressure ulcer prevention by helping nurses to ensure that patients who are at risk of developing pressure ulcers receive sufficient nutrition.

**Support from the physiotherapist**

The participants maintained that physiotherapists were generally very supportive of their efforts to prevent pressure ulcers, especially in getting their patients mobile. The ward based participants also said that the physiotherapists regularly repositioned their patients and updated their skin care related documentation. The ward based participants admitted that these were two aspects of pressure ulcer prevention that they were not always able to undertake themselves, so they were very grateful for the help that they got from the physiotherapists:

**Gladys (Deputy Ward Manager):** “The physiotherapists reposition patients and if they transfer patients, they document everything on turns charts. If the physiotherapist gets a patient out of bed, they’ll get the correct chair for the patient and a pressure (relieving) air cushion. The physiotherapists may attend to a patient twice or three times in an afternoon, and sit them out, when perhaps the nurses haven’t seen that patient since the morning.”
Michelle (Ward Manager): “The physiotherapists are based on our ward and they understand the importance of pressure relief and have a lot of input into it. Our physiotherapists are very good; they’ll move patients, sit them out, get them back into the bed and document it in the turn charts as well.”

The participants’ accounts show that physiotherapists play a key role in maintaining the skin integrity of patients by repositioning them regularly.

The statements made by the participants also highlight the fact that nurses do not take part in most of the interventions to maintain the skin integrity of their patients. The code of conduct states that nurses are responsible for all aspects of patient care (NMC 2008b), which means that nurses are responsible for ensuring that their patients are repositioned regularly and their patients’ pressure ulcer related documentation is accurate and up to date. So, the evidence about the role that nurses and physiotherapists play in pressure ulcer prevention in this study raises questions about the quality of nursing care that patients receive in clinical practice. However, what is ultimately important with regards to pressure ulcer prevention is that patients are repositioned regularly and their pressure ulcer related documentation is kept up to date; even if this is done by physiotherapists instead of nurses.

It is also clear from the participants’ accounts that physiotherapists are going above and beyond their normal role in clinical practice by repositioning patients regularly and updating their skin care related documentation. The pivotal role that physiotherapists appear to play in pressure ulcer prevention has not been previously reported, which suggests that this is a novel finding of this study.

**Medical support**

All the participants felt that, generally speaking; doctors knew very little about pressure ulcers especially how to prevent them. It was acknowledged that some doctors were interested in pressure ulcers, but it was felt that the majority of doctors only provided nurses with advice and support on managing pressure ulcers if the patient’s pressure ulcers had resulted in a POVA investigation. The participants said that the main support that they received from doctors with regards to pressure ulcer prevention and management was generally limited to prescribing whatever dressings were requested by the ward nursing staff or the tissue viability nurse specialist (TVN):
Cerys (Deputy Ward Manager): “The medical team does not give us any advice or support about pressure ulcer prevention or treatment! Usually the doctors prescribe whatever dressing they are told to prescribe by the nurse, unless they’ve come from a recent placement on a vascular ward.”

Gladys (Deputy Ward Manager): “The doctors leave pressure ulcer care to the nursing staff. The only exception is if a pressure ulcer causes a POVA case, where the doctors ask to see the ulcer for their documentation. There are not many doctors who know much about wound care, ‘cause they ask us to refer our patients to the tissue viability nurse.”

The lack of medical interest in pressure ulcer prevention and management that is highlighted by the participants is disappointing in view of the Trust policy and national guidelines, all of which highlight the importance of multidisciplinary collaboration in the maintenance of skin integrity in clinical practice. Nonetheless, there is evidence from another study which suggests that doctors are generally not interested in preventing and managing pressure ulcers.

A Swedish cross sectional survey study of retrospective audits of the notes of 413 hospitalised patients found that the presence of a pressure ulcer was only documented in the medical notes of 18 patients, but the nursing notes stated that there were 59 patients with a pressure ulcer (Gunningberg and Ehrenberg 2004). When the skin of 357 patients in this study was reviewed, an additional 60 patients with undocumented pressure ulcers were identified (Gunningberg and Ehrenberg 2004). This means that at the very least there were 101 patients who had a pressure ulcer that was not documented in their medical notes and 42 patients who had a pressure ulcer that was not documented in their nursing notes in this study. This Swedish survey has its limitations, but it augments the participants’ assertion that doctors appear to have little interest in pressure ulcer prevention because they perceive it to be primarily a nursing issue. This survey also shows that nurses in clinical practice are also guilty of poor pressure ulcer documentation, which in turn raises questions about the standard of care that they deliver to maintain the skin integrity of their patients.

Support from the TVN

The participants said that the amount of support that they received from TVN varied tremendously with the setting. Most of the participants stated that it was very difficult to get the TVN to review a patient with a pressure ulcer on a ward because they are
understaffed. As a result, the ward based participants said that they resorted to seeking advice from the TVN over the phone and did their best to manage the pressure ulcers that they encountered. A few of the participants stated that they had a great deal of support from the TVN who was always available when needed and provided training for the ward staff:

**Cerys (Deputy Ward Manager)**: “To be honest, we wait a long time for the tissue viability nurses to help us, because they are so understaffed. The tissue viability nurses have got a huge number of wards to cover as well as their own clinics. They are very helpful when they review patients, but we have to wait seven or eight days for them to come. You can imagine how a wound deteriorates while we are waiting for the tissue viability nurse, especially if the nurse lacks good knowledge of wound care or lacks the gumption to get advice over the phone.”

**Michelle (Ward Manager)**: “We have very close links with the tissue viability nurse and she is excellent, so dressings are not a problem. The tissue viability nurse does some ward based teaching sessions for us, and if there’s any training on pressure sores that I want for my staff, she’ll sort it out.”

Everyone that took part in this study stated that the TVNs were an invaluable source of advice and support on pressure ulcer prevention and management especially on the occasions that they were able to physically review the patients on the ward.

Many of the participants in this study, especially the non-clinical nurses opined that TVNs were too focused on reviewing patients and provided little or no education or training on pressure ulcer prevention and management for the ward nurses. These participants felt that the role of the TVNs should be more focused on the education of ward nurses given their limited ability to review patients on the wards. The TVNs were also reported to be overly critical of the manner in which ward based nurses delivered skin care to their patients at times. This was said to result in some nurses in clinical practice being reluctant to do anything about a patient’s pressure ulcer until it had been reviewed by the TVN, which had a detrimental effect on the patient’s care:

**Ella (Senior Nurse Manager)**: “We only have one tissue viability specialist nurse for many different hospital and community settings, which is not enough. When I worked on the wards, you couldn’t seek for advice from the tissue viability nurse; we were expected to manage wounds ourselves as nurses. The tissue viability nurse’s key role should be educating nurses and updating their knowledge on wounds. The tissue viability nurses should only be seeing patients when they have the most extreme kinds of wounds.”
Millie (Principal Lecturer): “Sometimes the tissue viability nurses go in guns blazing and criticise nurses over the quality of care that is given to patients. The ward nurses get very defensive and then the relationship deteriorates between the two parties. But it’s very easy for the tissue viability nurse to be critical of the care that is delivered, because they are blinkered and only focus on one aspect of care. These inter-personal issues complicate the ward nurses’ ability to provide good care for the patient. There is also an assumption that only the tissue viability nurse can solve problems with pressure ulcers, (which) does not help generic nurses to gain any confidence in dealing with pressure ulcers. So, a terrible culture develops where they (the ward nurses) feel that they can’t make decisions about the pressure ulcer and always have to wait for tissue viability nurse to decide what to do. So, if they can’t get hold of the tissue viability nurse or if it’s after five o’clock when the tissue viability nurse has gone home; then nothing is done for the patient because you are waiting for advice from the tissue viability nurse. Tissue viability nurses should emphasise their role as educationists and show nurses how to prevent pressure ulcers, rather than just troubleshooting when patients have grade three or grade four pressure ulcers.”

It must also be acknowledged that the participants’ accounts also suggest that one of the reasons why TVNs are unable to review patients with complex pressure ulcers is because they are overloaded with referrals for patients with pressure ulcers who ward based nurses should be able to manage.

Pressure ulcer prevention and management are fundamental aspects of nursing and this Trust has a policy and guidelines on the maintenance of skin integrity, which all nurses are expected to adhere to. Therefore, nurses working on wards should be able to manage pressure ulcers without referring every patient with a pressure ulcer to the TVN. The participants’ statements suggest that some nurses in clinical practice may not have a firm grasp of the role that they should play in maintaining their patients’ skin integrity, which is illustrated by their reluctance to initiate treatment to manage a pressure ulcer until the patient has been reviewed by the TVN. This also indicates that helping nurses in clinical practice to understand their role in preventing and managing pressure ulcers may help to improve patients’ pressure ulcer related outcomes. This intervention may also reduce the number of patients who are referred to the TVN and may also enable the TVNs to devote more time to educating nurses about maintaining skin integrity.

A senior member of the nursing directorate confirmed that the tissue viability department in this Trust was understaffed in some hospitals. This supported the participants’ assertion that it is very difficult to get a TVN to provide advice or to review a patient with a pressure ulcer.
ulcer in some settings. The shortage of TVNs may also explain why most of the participants stated that the TVNs in their settings did not provide them with enough support, especially with regards to education and training on the prevention and management of pressure ulcers. It is also possible that the TVNs in some settings in this Trust are not able to provide training sessions on pressure ulcer prevention in the manner that nurses in clinical practice would like because of the high number of patient referrals that they have.

Some of the evidence in this study suggests that some nurses in clinical practice have misconceptions about the role of TVNs in the maintenance of skin integrity. This is because the statements made by some of the participants imply that TVNs should review every patient with a pressure ulcer and oversee the management of every pressure ulcer. The primary role of TVNs is to facilitate the delivery of a high standard of care to maintain the skin integrity of patients by providing education and good usable guidelines for nurses in clinical practice, but they are also available to review patients with complex and or high grade pressure ulcers.

The data in this study also suggests that changes can be made to the manner in which the TVNs support their nursing colleagues in clinical practice to ensure that patients receive the best care to maintain their skin integrity. One such option would be to ensure that nurses in clinical practice have clearer guidelines for maintaining skin integrity and criteria for referring patients to the TVNs. If nurses in clinical practice and were made to adhere to these guidelines and criteria, this might reduce the workload for TVNs while ensuring that patients received the best possible care as quickly as possible.

The reported anger of the TVNs with regards to the manner in which some nurses in clinical practice deliver care to maintain their patients’ skin integrity is understandable in view of some of the reported nursing practices. The reports of some nurses not making any decisions about a patient’s pressure ulcer(s) until they have been reviewed by the TVN are of particular concern because they suggest that some nurses are not meeting their responsibilities to maintain their patients’ skin integrity. Therefore, one can understand why TVNs challenge nurses who they feel are delivering an inappropriate standard of care to their patients to prevent and manage pressure ulcers. However, it is clear that TVNs should
be aware of some of the unintended consequences that a heated exchange about pressure ulcer prevention and management with nurses in clinical practice can have on patient care.

**Other sources of help or advice**

Some of the participants stated that if they were unable to consult the TVN, they sought advice on pressure ulcer prevention and management from one of the pharmacists in the Trust who had an active interest in wound healing. The majority of participants said that their interactions with the pharmacist were limited to ordering and obtaining different kinds of dressings. All of the participants also stated that a newly implemented Trust policy meant that dressings to manage pressure ulcers were ordered from main stores instead of the pharmacy as a result of fiscal pressures. This policy had resulted in a reduction in the participants’ interactions with the pharmacist with regards to the maintenance of skin integrity. The participants also stated that this policy of ordering dressing from main stores often meant that there were delays in patients obtaining the dressings that they needed to manager their pressure ulcers:

**Cerys (Deputy Ward Manager):** “If I have a difficult pressure sore and I can’t get help elsewhere, I speak to John* the pharmacist who specialises in wound care even though he works in another hospital. John* is very good at giving advice on wounds.” (*name altered to maintain confidentiality)

**Gladys (Deputy Ward Manager):** “Pharmacy used to supply whatever dressings we asked for, but now we are limited ‘cause we’ve got to order dressings from main stores. So sometimes we have problems ordering dressings, because if you need a dressing now you might have to wait two or three days before you get it.”

The participants also revealed that they consulted district, community and outpatients’ nurses who dealt with wounds like pressure ulcers on a regular basis if they needed any additional guidance or resources to prevent and manage pressure ulcers and they could not get hold of the TVN. The participants felt that these fellow healthcare professionals were a valuable source of advice, dressings and support on pressure ulcers and other aspects of tissue viability as they dealt with wounds on a regular basis. The participants felt that these fellow healthcare professionals were a valuable source of advice, dressings and support:

**Cerys (Deputy Ward Manager):** “Pressure sores are not just a topic for tissue viability nurses, there are other people that we can contact for help and advice like the district nurses because they’re experts at dealing with patient’s wounds. Contacting the district nurses is very important especially if the patient has come in with a wound...”
from the community, because you wanna know what they have been using to manage the wound.”

Gladys (Deputy Ward Manager): “If the tissue viability nurse isn’t available for advice, we ask David*, who is an outpatients nurse that does a lot of wound care. David also has his own stock of dressings, so sometimes we borrow dressing from him if we are waiting for dressings from pharmacy.” (*name altered to maintain confidentiality)

The participants’ accounts highlight the positive impact that collaboration, support and advice between different healthcare professionals can have on the skin care that patients receive. These accounts also show that nurses in clinical practice can seek help and advice on preventing and managing pressure ulcers from members of the MDT other than the TVN when it is needed. In this study, close collaboration nurses and other members of the MDT appears to have ameliorated some of the challenges that the participants faced in trying to maintain their patients’ skin integrity.

The support and advice that the participants said that they sought from different members of the MDT to prevent and manage pressure ulcers when the TVN was unavailable is a significant finding. This finding is significant because it shows that the participants in this study especially the nurses in clinical practice make every effort to get help to prevent and manage pressure ulcers when they need it. This study’s findings about the other sources of help and advice on pressure ulcer prevention should be investigated further to establish if nurses working in other settings can get the same level of support from other healthcare professionals.

It is disappointing that the participants pointed out that the financial restrictions meant that if the participants needed dressings, then they had to order them from main stores. This change from getting dressings from pharmacy to ordering them from main stores often meant that there were delays before the wards received the dressings that they had ordered. This did not preclude the nurses from borrowing dressings from other wards. The researcher visited the many of the non-acute medical wards in hospitals in this NHS Trust as part of the recruitment process in this study. During these visits, the nurses in these settings showed the researcher their small stock of basic dressings. So, these visits unexpectedly enabled the researcher to confirm the participants’ accounts about the difficulty of obtaining dressings to manage complex pressure ulcers when they were needed.
Impact of MDT support on patient care

The delivery of the highest standard of care possible to maintain skin integrity is dependent on the input and close collaboration of different members of the MDT. This is highlighted in guidelines for pressure ulcer prevention and management by NICE (2001a; 2005e), EPUAP and NPUAP (2009a; 2009b) and the AWTVNF (2011). This is in contrast to the findings of this study which indicate that the role that different members of the MDT play in the maintenance of skin integrity varies tremendously.

The findings of this study show that dieticians and physiotherapists play a full and active part in the maintenance of skin integrity by ensuring that patients have adequate nutrition and are repositioned regularly. However, it is a cause for concern that physiotherapists reposition patients many times throughout the day, without a nurse present. This is because regular patient repositioning is one of the fundamental responsibilities of any nurse in clinical practice and physiotherapists have other responsibilities. The evidence about the role that physiotherapists play in patient repositioning also highlights some of the inadequacies of the care that nurses deliver to maintain their patients’ skin integrity. This evidence also shows that there are some healthcare professionals like the physiotherapists who are prepared to go above and beyond their role to ensure that patients are repositioned regularly.

Doctors and TVNs have an important role to play in helping nurses to prevent and manage pressure ulcers because of their breadth of knowledge and expertise on the medical aspects of a patient’s care and tissue viability respectively. Doctors oversee a patient’s treatment, so they are ideally placed to ensure that the skin integrity of their patients is maintained. The evidence in this study shows that nurses in clinical practice receive very little advice and support from doctors to prevent and manage pressure ulcers. The participants’ statements indicate that doctors are only interested in the maintenance of skin integrity of their patients once a POVA investigation was underway because of the legal implications of a POVA investigation with regards to the management of pressure ulcers.

In this Trust, TVNs are employed to provide advice and guidance to nurses working in primary and secondary care to ensure that the skin integrity of patients is maintained irrespective of the care setting. The participants’ accounts indicate that TVNs efforts to do
their job properly are hindered by the fact that they are short staffed. The shortage of tissue viability nurses was said to limit the ability of TVNs to provide nurses in clinical practice with the support that they needed to maintain their patients’ skin integrity. The vast majority of the participants stated that they felt that the TVNs were too preoccupied with reviewing patients themselves and did not provide nurses in clinical practice with sufficient training to empower them to make the appropriate decisions about pressure ulcer prevention and management.

It was also felt that some TVNs criticised nurses in clinical practice about their pressure ulcer related practices in a manner that did not foster a good working relationship. This criticism was said to result in some nurses in clinical practice being very reluctant to make any pressure ulcer related decisions on their own, which often meant that the interventions to maintain their patients skin integrity were not implemented until the TVN was consulted. This reported practice is a terrible indictment of the quality of care to maintain skin integrity that is delivered in clinical practice because it suggests that some nurses are not meeting their responsibility to maintain their patients’ skin integrity.

It must be noted that this finding is only based on the participants’ accounts and must be confirmed more objectively before any measures are taken to remedy the situation. This is important because none of the clinical nurse participants in this study admitted that they did nothing to protect their patients’ skin until they had consulted the TVN. However, all of the participants including the non-clinical nurse participants maintained that they knew that there were some nurses who had this unfortunate attitude towards pressure ulcer prevention and management. The view that there are some nurses who do not initiate the appropriate measures to manage a pressure ulcer until the TVN is consulted has not been previously reported and merits further investigation. However, this view explains why practices like poor pressure ulcer related documentation continue to be reported in studies like Gunningberg et al. (2009) and Jordan-O’Brien and Cowman (2011).

Nurses in clinical practice also need the help of doctors and TVNs to prevent and manage pressure ulcers for other reasons. Doctors and TVNs are also very influential in ensuring that nurses receive the resources that they need to maintain their patients’ skin integrity like specialist pressure relieving equipment and dressings. This is a subtle but important point
which is evident in this study as the participants’ state that some dressings that are needed to manage pressure ulcers can only be obtained from pharmacy, which means that they must be prescribed by a doctor or a tissue viability nurse. Therefore, if no tissue viability nurse or doctor is available or if they are unaware of the best dressing to use then it is challenging for a ward based nurse to ensure that their patient receives the appropriate treatment to manages their pressure ulcer. So, the data shows that doctors and TVNs are only able to provide a limit amount of support to nurses with regards to pressure ulcer prevention and management which makes it challenging for the nurses to ensure that their patients receive the highest standard of skin care.

The advice and support on pressure ulcer prevention and management which the pharmacist and nurses working in other settings are said to provide to the participants appears to have a positive impact on patient care as it ensures that patients receive the best possible care as quickly as possible. The evidence on the relationship between the participants, nurses working in other settings and the pharmacist also highlights the positive impact that close collaboration between different healthcare professionals in the MDT can have on patient care in clinical practice.

The participants’ statements show that the delivery of effective, high quality care to maintain skin integrity by nurses requires the active participation of other healthcare professionals in the MDT. These statements also show that the central role in pressure ulcer prevention and management lies with the nurse because they are in a position where they can ensure that the patient receives the care that they need. This is highlighted by the fact the data shows that dynamic and proactive nurses get the help that they need to protect their patients skin from other members of the MDT when doctors and TVNs are unable to provide them with the support that they need.

The participants’ accounts of the role that the MDT plays in their delivery of care to prevent and manage pressure ulcers leads to a number of conclusions. Firstly, nurses who look after patients on a daily basis must take responsibility for their own knowledge and practice with regards to the maintenance of skin integrity. This means that nurses in clinical practice must seek the help and advice that they need to prevent and manage pressure ulcers from other healthcare professionals in the MDT and must not rely solely on the TVN or doctors.
members of the MDT, especially doctors and TVNs must be aware of the impact that they can have on the manner in which nurses deliver skin care to their patients. TVNs need to be aware of the fact that a negative interaction with ward based nurses about managing pressure ulcers may have an unintended but detrimental effect on the skin care that nurses in clinical practice subsequently deliver to their patients. Hospital managers and others involved in the co-ordination of patient care need to be aware of the potential for improved patient care with regards to pressure ulcer prevention and management that can result from greater collaboration between nurses and other healthcare.

Future research must focus on the manner in which the relationship between ward based nurses and other members of the MDT affects the care that patients receive to prevent and manage pressure ulcers is needed. This is important because it would help to establish the extent to which the findings of this study can be applied to other settings.

### 3.5.2 Resource provision

The participants stated that the staffing levels that they were working with mainly as a result of the changes arising from financial pressures were hindering their ability to prevent pressure ulcers:

**Helen (Deputy Ward Manager):** “When it’s a busy shift sometimes it’s difficult to prevent pressure ulcers. You know that you’ve got patients that need to be turned two hourly and you want to make sure you do it, but you can’t because you don’t have the manpower. So I find it very frustrating when we don’t have enough staff to repositioning the patients.”

**Michelle (Ward Manager):** “It’s quite difficult to do the drugs, turn and toilet the patients with the staffing levels that we have, especially on the nights. We tried to alter the way we work to help with the patient’s pressure relief, but I lost a fifth of my staff when we were downsized.”

The participants also maintained that staffing issues affected the manner in which they delivered and prioritised different aspects of patient care. They said that this was due to the fact that they often had to look after a group of very sick patients, which they found very difficult to cope with. The participants stated that there were a number of different aspects of patient care that nurses had to prioritise and deliver, so they often resorted to doing things as quickly as possible:
Cerys (Deputy Ward Manager): “On an average day, you’ve got quite a few patients to look after who are ill and at risk of cardiac arrests. You’ve got drugs to give to the patients, communicate with other people, speak to the patient’s relatives and do the observations as well. You have to make sure that the patients eat their meals, monitor their fluid intake and document it all. You have patients on sliding scale insulin, or G.T.N (Glyceryl Tri-Nitrate) infusions (which help control the patient’s blood pressure), and C.V.P (Central Venous Pressure) monitoring (which tells us the patient’s level of intravascular hydration). All these things get in the way of you actually nursing all the patients, so you just kind of focus on getting things done. It’s difficult to slow down and do things methodically when you know you have fourteen people to wash.”

This particular account is used as an exemplar of the views of the other participants in this study, but it raises a number of salient points which require discussion. At first glance, the participant’s statement appears to suggest that issues like communication, updating documentation and titrating medication get in the way of nursing the patient. These aspects of patient care are an integral part of the nursing, which are set documents that underpin nursing practice like the Fundamentals of Care (Welsh Government 2003) and the Code for nurses (NMC 2008b).

On closer inspection, the main point that appears to emerge from this account is the fact that the participants feels that the number of things that nurses are expected to do get in the way of them spending an appropriate amount of time on the issues they perceive to be fundamental aspects of nursing. So, perhaps the central point that must be taken from this particular quote is not the implied relative value of different nursing interventions; but the fact that a shortage of nursing staff compels them to prioritise patient care in a manner that contravened best practice in their opinion. The view that the main issue in this account is the impact of low staffing levels and the concomitant increase in workload is underscored by the fact that nurses have a legal obligation to implement many of the interventions which are cited as getting in the way of nursing like maintaining an appropriate blood pressure for patients who are at risk of having a heart attack. This legal imperative may also explain why the participants try to do things as quickly as possible when they are short staffed; as they feel under pressure to deliver a number of different aspects of patient care that have a direct impact on the patient’s health.

Studies in other settings have also highlighted the impact that financial limitations can have on nurse staffing levels. These studies report that financial limitations mean that hospitals
are having to deliver care that is increasingly complex and labour intensive at a time when their inpatient capacity is being reduced (Hawley, Stilwell et al. 1993; Aiken, Clarke et al. 2002a). The drive for greater fiscal discipline has resulted in hospitals employing fewer registered nurses and more nursing auxiliaries to reduce staffing costs (Blegen, Goode et al. 1998; Rothberg, Abraham et al. 2005). Some of these studies are a bit dated, but their findings are worth noting given the fact that the NHS is going through what is arguably the greatest period of financial austerity since it was created. The findings of these studies augment the participants’ view that the financial pressures which the NHS was facing at the time of this study were leading to a reduction in the number of nurses in each clinical setting.

The impact of nurse staffing levels on patient care has been highlighted in a number of studies. Studies that have been undertaken in different settings have reported that there is a link between staffing levels and adverse patient outcomes (Aiken, Clarke et al. 2002a; Person, Allison et al. 2004; Rafferty, Clarke et al. 2007). There is also evidence that a shortage of nursing staff leads to patients being positioned less frequently and not being properly fed, which increases the risk of skin disintegration (Kalisch 2006). These studies have been undertaken in different settings and have varying levels of generalisability and methodological rigour. Nonetheless, these studies augment the participants’ view that when there are insufficient staff on a ward or the workload is too great then nurses are unable to undertake the interventions required to maintain their patients’ skin integrity.

There is also evidence from other studies which highlights the impact that nurse staffing levels can have on the delivery of care to prevent pressure ulcers. A systematic review of 22 large scale international studies undertaken between 1990 and 2005 found that patients on wards with a high nurse to patient ratio had more adverse outcomes like developing a pressure ulcer than patients on wards with a lower nurse to patient ratio (Lankshear, Sheldon et al. 2005). The studies in this systematic review were robust, set in different locations and used a range of research methods to examine the relationship between nurse staffing levels and patient outcomes (Lankshear, Sheldon et al. 2005). Despite these differences, the fact that these studies reported similar findings suggests that there is indeed a relationship between nurse staffing levels and the care that is delivered to prevent pressure ulcers. To put it simply, the evidence from the studies in this systematic review
indicates that the fewer patients that a nurse has to look after the less likely they are to have a negative outcome like skin disintegration.

Another salient point about the relationship between nurse staffing levels and adverse patient outcomes emerged from this systematic review which appears to be worth noting. The data in the studies in this review also showed that the relationship between nurse staffing levels and patient’s healthcare outcomes is curvilinear and once an optimal staffing level was achieved there was no further improvement in patient outcomes (Lankshear, Sheldon et al. 2005). Although this systematic review found that there was an optimum nurse patient ratio, it still shows that if a nurse has a high number of patients to look after then adverse outcomes like pressure ulcers are more likely. Therefore, there is a broad range of research evidence from different studies which adds credence to the findings about the negative impact of poor staffing levels on the delivery of care to prevent pressure ulcers.

**Equipment and resource availability**

The participants maintained that they did not have enough equipment and resources to prevent pressure ulcers, which meant that whether a patient received equipment or not was down to chance. The participants stated that they did everything they could to obtain equipment including completing incident forms when the equipment was unavailable:

**Cordelia (Senior Staff Nurse):** “*We cannot access the equipment to prevent pressure ulcer when we need it. For example, at the moment we haven’t got a bariatric hoist in the hospital. If I can’t get hold of equipment when a patient needs it, then I’ll fill in an incident form, because I try to be the patient’s advocate.*”

**Darlene (Senior Nurse Manager):** “*We don’t have enough equipment and resources to prevent pressure ulcers. You do your patient assessment and identify the patients who are at risk of developing pressure ulcers, but whether the patient gets that equipment depends on whether or not you can acquire it.***”

The use of pressure relieving equipment is an important part of maintaining skin integrity because it helps to relieve pressure on the skin of people who are at risk of or have already developed pressure ulcers. The use of pressure relieving equipment is set out as an integral part of pressure ulcer prevention in NICE (2001a) and the EPUAP and NPUAP (2009a) guidelines. These guidelines are based on the best available research evidence which shows that the appropriate use pressure relieving equipment helps to reduce the number of
people who develop pressure ulcers. This bolsters the participants’ assertion that it is
difficult to maintain skin integrity when pressure relieving equipment is not available.

The participants said that some of the pressure relieving equipment that was available was
hazardous to their health and endangered the wellbeing of their patients. As a result, the
participants felt that they needed better equipment to enable them to look after the
patients safely:

**Cordelia (Senior Staff Nurse):** “We need bariatric equipment and beds that will take
the heavier patient because we are getting so many bariatric patients in now. The
ideal situation would be to have only electric (profiling) beds, because the Kings Fund
beds that we’ve got are a risk to the patients from a manual handling point of view
and are causing injuries to the nurses.”

**Leah (2nd year student):** “It would be better to have proper beds rather than
trolleys, ‘cause a bed has got more cushioning than a trolley for the patient’s skin.
We have got trolleys on our ward that are classified as beds. It’s very difficult to turn
patients when they are on a trolley so the initial implementation of pressure ulcer
prevention care by regular turns isn’t possible until the patients get onto a proper
bed. The patients in A&E are only allowed to stay on the same trolleys for four hours
because of the government’s guideline that if patients are on a trolley in A&E for
more than four hours then the Trust is fined ten thousand pounds. But the patients
can stay on a trolley on our ward for twenty four hours on our ward even it’s exactly
the same trolley as that in A&E because the Trust classifies the trolleys on our ward
as beds!”

The researcher was shown around many of the participants’ wards by the senior nurses
when he visited them to try and recruit participants to this study. During these visits, the
researcher was often shown the pressure relieving equipment and dressing that the nurses
in these settings used to protect their patients’ skin. The researcher observed that that were
a large number of Kings Fund beds and a very limited provision of pressure relieving
equipment for bariatric patients. So, these visits to recruit participants to this study
unexpectedly enabled to researcher to see first-hand some of the resource provision issues
that were subsequently highlighted by the participants.

The visits to different wards as part of the recruitment process also revealed that in some
wards patients were nursed on trolleys. The nurses working in these wards said that they
looked after their patients on trolleys because they were waiting to transfer them to other
settings. These nurses also said that if the patients were not transferred elsewhere within
24 hours, then they were moved onto a conventional bed as soon as they could find one.
The researcher also noted that trolleys were called trolleys in the Accident and Emergency department, but the same trolleys were referred to as “beds” when the patients were moved to a ward. The researcher was unable to identify any formal hospital or trust policy which explained how this transformation from trolley to “bed” occurred. This raises a number of questions, but the subtle point that appears to be of greater significance is the fact that the statements made by the nurses in these wards imply that it is easier to transfer patients to other settings if they are on a trolley. This may well be true, but a trolley does not offer the same level of pressure relief as a mattress on a conventional hospital bed even when it is called a “bed”. Therefore, patients who are a high risk of developing pressure ulcers during the acute phase of their illness are sometimes left on a trolley for up to a day; which puts them at a higher risk of skin disintegration than if they were on a conventional hospital bed.

When the issue of how trolleys became beds was raised with the nurses on the wards during the researcher’s visits, the nurses in these settings said that the there was a great deal of pressure on the trust from the Welsh Government to ensure that the patients who reported to the Accident and Emergency department were either admitted to a ward or discharged within four hours of their arrival. The nurses also said that if this target was not met then there financial penalties were imposed upon the Trust by the Welsh Government. At the time that this study was undertaken, the four hour waiting rule on patients who reported to Accident and Emergency also applied to other hospitals in England and Wales. So, some aspects of the participants’ statements about the availability of pressure relieving equipment and its impact on their practice were unexpectedly confirmed by what the researcher observed and discussed with nurses in different settings on his visits to recruit participants to this study.

**Impact of resource provision on patient care**

The participants said that the shortage of staff and lack of appropriate pressure relieving equipment had a negative impact on the maintenance of skin integrity because they forced nurses to get things done quickly. The participants were adamant that these pressures contributed to the prevalence of unsafe patient repositioning in clinical practice, even though nurses were aware of the correct procedures:
Leah (2nd year student): “Nurses are not very good at using the equipment (that is) available for patient transfers, because they use draw sheets instead of slide sheets to move the patient, so you get friction on the patient’s skin as the patient is being dragged up the bed. This practice of using draw sheets to move patients is still going on even though you say to the nurses: ‘Hang on a minute! I’ll get the slide sheets. And you go and get the slide sheets, but sometimes when you come back they say: we’ve already moved the patient. Moving and handling can be quite poor, ‘cause nurses are in a hurry to get things done.”

Millie (Principal Lecturer): “Manual handling is an important issue because the drag lift still goes on where the patient is dragged up the bed. If you go to any cohort of students and ask them if they have recently dragged a patient up the bed you get between thirty and fifty percent of students saying that they have drag lifted patients recently. When you consider that most of our cohorts have about a hundred students then that means you always have about thirty to fifty people always admitting that they have dragged patients recently, perhaps as recently as last week.”

The participants’ statements about patient repositioning in clinical practice were not independently verified by other means like direct observation. Despite this, the evidence suggests that the participants’ views are worth noting because the majority of nurses in this study were either the cascade trainers for manual handling on their wards or were senior nurses. This is because the cascade trainers for manual handling are qualified to judge when a patient has been repositioned in an unsafe manner when they are on the ward because they have been taught the proper techniques for repositioning patients. Senior nurses are well equipped to judge the nature of patient transfers because a key part of their job is evaluating the calibre of care that the nurses on their wards deliver.

The accounts of the principal lecturer and students were partially verified by the curriculum for nurse training at the time of the study, which revealed that all students were taught how to transfer patients safely before they were sent out on their first clinical placement. This means that the principal lecturer and the students who took part in this study were in a position to judge the nature of the patient transfers that took part in clinical practice.

The findings about the impact that shortage of staff and pressure relieving equipment have on the nature of patient transfers have not been previously highlighted in any other studies. The relationship between a lack of resources and nurses being in a hurry to get things done is an aspect that has not been previously highlighted in any other studies or papers, but it is largely predicated on the participants’ accounts. Therefore, further research is needed to
ascertain the extent to which the findings of this study apply to nurses working in other settings.

Values and care delivery

The participants highlighted a number of things that affected the manner in which care to maintain skin integrity was delivered in clinical practice, but they were adamant that the value that a nurse placed on pressure ulcer prevention had a direct impact on patient care. Nurses who placed a high value on pressure ulcer prevention care were said to be more proactive and quicker to implement preventative measures than those with a lower value. The participants said that nurses who placed a low value on pressure ulcer prevention were less proactive and would only do the bare minimum that they had to:

**Helen (Deputy Ward Manager):** “Some nurses like pressure ulcers, but others don’t. The nurses who are enthusiastic about pressure ulcers prioritise pressure ulcer prevention and management in their work load compared to the nurses who are less enthusiastic about pressure ulcers.”

**Cerys (Deputy Ward Manager):** “In every part of nursing the people who are interested in something are going to have a lot more knowledge and understanding. So the nurses who are interested in pressure sore prevention and management are going to be more proactive and will change the care plan if it isn’t working. The nurses who don’t like wounds are less likely to question the care plan if the pressure sore is not getting better.”

The participants maintained that the low value placed on pressure ulcer prevention by some nurses had a negative impact on patient care as inappropriate measures were sometimes implemented due to a desire to complete wound management as quickly as possible:

**Cerys (Deputy Ward Manager):** “When some nurses are dressing a wound they just pick any dressing because they think that as long as the wound’s dressed then its job done! These nurses are not interested in healing the wound but are only interested in covering the wound so that they can write wound redressed in the care plan. When you ask these nurses their rationale for using a particular dressing, they say, ‘cause so and so had also put it on there.’”

The impact that the value that a nurse places on pressure ulcer prevention has on their motivation to deliver care to protect a patient’s skin has not been previously covered in tissue viability or nursing research.
The data in this study about the impact that the value that a nurse places on pressure ulcer prevention has on their actions are consistent with what is known about values. Research on values has shown that if a person values something then they are more inclined to have an active interest in it (Hebel 1998; Baker 1999). Empirical research studies also indicate that a person’s values influence their judgements, attitudes and behaviour to such an extent that a person has an observable behavioural pattern that is congruent with their values (Bernard 2002; Pakizeh 2005). These value studies have focused on people’s world values and not on the value that they place on a specific issue, but they are robust and report similar findings even though they use different research methods. Hence, the evidence from value studies add credence to the participants’ view that nurses try to deliver skin care to their patients in a manner that is in line with the value that they place on pressure ulcer prevention.

The participants maintain that nurses who place a high value on pressure ulcer prevention are more proactive and do more to protect their patient’s skin than those who place a low value on pressure ulcer prevention. This claim about the relationship between a nurse’s value of pressure ulcer prevention and the skin care that they deliver to their patients is not supported by any direct evidence in this study, but it is supported indirectly by the results of a number of value studies. Despite this, it is difficult to make any definitive statements about nurses who place a low value on pressure ulcer prevention as no such nurses took part in this study. So, the relationship between the value that a nurse places on pressure ulcer prevention and their delivery of skin care merits further examination. This research would also help to establish the extent to which the findings of this study on this topic can be applied to nurses working in other settings.

**Chapter summary and conclusion**

This chapter has discussed the findings pertaining to the value that nurses place on pressure ulcer prevention and its impact on the skin care that patients receive.

The people that took part in this study were all found to place a high value on pressure ulcer prevention, but they said that they were other nurses who placed a low value on pressure ulcer prevention. They also intimated that a nurse’s value of pressure ulcer prevention was a powerful influence on the manner in which they prioritised and delivered skin care. Although the participants claimed to be more enthusiastic and proactive about maintaining
their patients’ skin integrity than nurses who place a low value on pressure ulcer prevention, they acknowledged that their delivery of skin was affected by clinical priorities and other factors.

The participants stated that their delivery of skin care was affected by clinical priorities, but they claimed that other factors like routine and ritual did not affect their practice. Instead, the participants claimed that these factors had more of an impact on the practice of nurses who place a low value on pressure ulcer prevention. This assertion like many others about nurses who place a low value on pressure ulcer prevention must be interpreted with caution as no such nurses took part in this study. Despite this, there is evidence which shows that the factors which are cited by the participants can affect the manner in which nurses prioritise and deliver care to prevent pressure ulcers.

The participants’ accounts also revealed that the majority of care to maintain skin integrity is delegated to nursing auxiliaries and students as nurses are busy seeing to other things. At first glance, this appears to be inconsistent with the high value that the participants claim to place on pressure ulcer prevention. One possible explanation for this apparent disconnect between values and practice appears to lie in the fact that nurses are under pressure to prioritise things like bed management and busy nurses opting to delegate pressure ulcer prevention as they attend to other more pressing issues.

On the other hand, the participants state that they make a concerted effort to actively participate in the skin care of patients who they deem to be at high risk of skin disintegration. This is bolstered by nurse participants’ statements said that they only delegated skin care related interventions to nursing auxiliaries and students who were competent to deliver those interventions. Therefore, the participants practice is entirely consistent with their values as they are only delegating skin care for patients at low risk of skin disintegration to competent students and nursing auxiliaries.

The manner in which skin care is delegated suggests that there may be other aspects of nursing care that nurses feel are more important or pressing than pressure ulcer prevention and so the interventions pertaining to skin care are easier to delegate. It is also possible that the delegation of most aspects of pressure ulcer prevention is due to the fact there are other aspects of patient care that are just as important but can only be undertaken by
nurses. Therefore, interventions pertaining to pressure ulcer prevention are delegated to other members of staff, while the nurses undertake the aspects of patient care that cannot be delegated.

The participants pointed out that even when they were able to take part in care to maintain skin integrity; their efforts to provide the best possible care which is consistent with their values were often affected by other issues like MDT support and resource provision. This suggests that the delivery of high quality to skin care to patients is not only subject to the nurses’ values, attitudes, beliefs and judgement; but it is also subject to other issues which are beyond their control. Despite these issues, the participants maintained that the value that a nurse placed on pressure ulcer prevention was a key determinant of the skin care that patients received. Nurses who place a high value on pressure ulcer prevention were said to be more proactive and dynamic in ensuring that their patients received the highest possible standard of care to maintain skin integrity, unlike nurses who place a low value on pressure ulcer prevention.

Having established the nature of the relationship between the value that nurses place on pressure ulcer prevention and the skin care that patients receive, the next chapter will discuss the other themes that emerged from this study.
Chapter 4: Findings and discussion 2

Introduction

This chapter discusses the findings pertaining to the other themes that emerged from the data in this study. The findings that will be presented in this chapter will focus on the manner in which the value that nurses place on pressure ulcer prevention was formed and the value that nurses place on other aspects of nursing.

These findings will be discussed alongside the best available research evidence and pertinent literature in a discursive format that focuses on the social processes pertaining to the core category and shows how a conceptually dense grounded theory was inducted. This discussion will also highlight the manner in which a robust grounded theory emerged from the analysis of data in this study.

The first part of this chapter discusses the findings pertaining to the formation and evolution of the value that the participants placed on pressure ulcer prevention. This proceeds into a discussion of the findings of this study that relate to the value that the participants place on other aspects of nursing. The penultimate section of this chapter examines how all the findings that have been presented in this thesis relate to the core category and grounded theory. This segues into the conclusion which summarises the main points and that can be drawn from the findings that have been discussed in this chapter.

4.1 Forming a high value of pressure ulcer prevention

The participants’ accounts revealed that the value they placed on pressure ulcer prevention had gone from low to high at some point in their careers. These accounts also highlighted some of the factors that had influenced participants’ values and the key landmarks in their transition to placing a high value on pressure ulcer prevention.

All the participants identified the same factors and landmarks in this transition, even though the training that they had undergone and their levels of experience were different. This suggests that all the participants had undergone a parallel process which resulted in them placing a high value on pressure ulcer prevention. The findings pertaining to this process will be discussed in the next few sections.
4.1.1 First pressure ulcer seen

The participants said that the first key landmark in their transition to a high value of pressure ulcer prevention was their first encounter with a patient with a pressure ulcer. The participants’ recollections of this landmark are very similar despite the differences in their experience and professional standing. At this stage in their careers, the participants had different jobs and were students, nursing auxiliaries or in their first job as nurses. All of the participants stated that they were shocked the first time that they saw a patient with a pressure ulcer and they realised that they knew very little about pressure ulcers or how to prevent them. The participants’ accounts reveal that the only care that they delivered to prevent pressure ulcers at this stage in their careers was regular patient repositioning at the behest of their senior colleagues:

**Gladys (Deputy Ward Manager):** “I saw my first pressure sore in the sixties! I was a third year pupil nurse and we were told in our training that you had to change the patient’s position regularly to prevent pressure sores. But I didn’t realise that lying in bed could result in a big sacral pressure sore like one that this very ill lady had. I was horrified when I saw that pressure sore.”

**Michelle (Ward Manager):** “When I saw my first pressure sore, I was working in a nursing home before I started my nurse training. The patient had a pressure sore that was so deep that you could actually see the bone at the base of the sacrum. I just couldn’t believe it when I saw that pressure sore! But I didn’t really know anything about pressure sores.”

**Leah (2nd year student):** “I first saw a pressure ulcer was when I started nursing as an auxiliary. I was shocked that people could actually have a pressure ulcer. But I had no knowledge of pressure ulcers, so I wondered how someone could develop a pressure ulcer. I didn’t gain an understanding of pressure ulcer formation for a long, long time because I was just told to move the patients regularly.”

These accounts suggest that the participants placed a low value on pressure ulcer prevention at this junction because they just did as they were told to do to maintain skin integrity, but did not comprehend why they were doing it.

The participants’ statements also reveal that they relied on more senior colleagues to take the leading role in the care to prevent the formation of pressure ulcers. The lead role played by senior nursing colleagues in pressure ulcer prevention is understandable for those participants who were nursing auxiliaries or students at this stage, because they work under the supervision of a nurse. It is worrying that the participants who were nurses when they...
first saw a pressure ulcer appear to have relied on other nurses to guide the skin care that they gave to their patients. This because all nurses are taught how to maintain the skin integrity of their patients in their pre-registration education and all nurses are accountable for all the nursing care that is given to their patients (NMC 2008b). Therefore, one would have expected the participants who were nurses at this stage to have had sufficient knowledge about pressure ulcer prevention to take the lead role in the skin care of their patients.

**Education on pressure ulcers for nursing auxiliaries**

Most of the participants in this study began their careers in healthcare working as nursing auxiliaries. These participants were adamant that they received little or no education on pressure ulcer prevention at this stage in their careers. They also said that the limited amount of education that they received was of little significance compared to what they were taught during nurse training. When the participants were nursing auxiliaries, they said that they relied on on-the-job learning from their peers in clinical practice. These participants maintained that they only received some formal education and training on pressure ulcer prevention long after they had been looking after patients. The participants who were nursing auxiliaries the first time that they saw a patient with a pressure ulcer said that all they were told to do was to reposition the patient regularly and check the skin for any signs of redness:

**Joanne (3rd year student):** “I did not really get a lot of training or education on pressure ulcers when I was a nursing auxiliary, ‘cause the responsibility for pressure ulcers was down to the qualified nurse. Obviously the qualified nurses highlighted the importance of preventing pressure ulcers to the N.A.’s because the N.A.’s do a lot of the patient washes. If a nursing auxiliary discovered any problems with the patient’s skin you just reported it to the qualified nurse. So I can’t say I had real formal training about pressure ulcers, it was more a case of learning on the job.”

**Leah (2nd year student):** “The education on pressure ulcer prevention that I was given as a nursing auxiliary was horrifically poor, very poor. I was given very little education and we weren’t given any real formal training. You were told to turn patients and check for redness on their skin, because as nursing auxiliaries you are not taught anything, if you are lucky you might get some training, but I learnt it all on the job. I had been working (as a nursing auxiliary) for six months by the time I eventually had some training on how to care for a patient. So the knowledge I had about pressure ulcers was something I got on the job, to be honest.”
The lack of education on pressure ulcer prevention for nursing auxiliaries that is highlighted by the participants is an important issue. This is because the participants’ accounts (which were discussed in the last chapter) show that the majority of care to maintain skin integrity in clinical practice is delegated to nursing auxiliaries and students. The evidence in this study also shows that the majority of these measures to protect the patient’s skin are often undertaken by a nursing auxiliary without a nurse present. Therefore, educating nursing auxiliaries about pressure ulcer prevention is of paramount importance in light of the role that they play in maintaining the skin integrity of patients in clinical practice.

Many of the participants, especially those working as nursing auxiliaries conceded that they did not know what a pressure ulcer was the first time that they saw it. This raises the possibility that the participants who were nursing auxiliaries at this stage lacked sufficient education to know when they needed to tell a nurse that a patient’s skin was disintegrating. The fact that nursing auxiliaries may lack a sufficient level of education to correctly identify pressure ulcers, especially those which are classified as grade one pressure ulcers has been highlighted by researchers like Gunningberg and Ehrenberg (2004). The views expressed by these researchers are largely predicated on their opinions, but they support the view that nursing auxiliaries’ knowledge about maintaining skin integrity is poor.

It must be acknowledged that the educational curriculum for nursing auxiliaries within this trust at the time this study was undertaken was not examined to ascertain what and when the nursing auxiliaries were taught about pressure ulcers. This was because the primary focus of this study was on the values and practice of nurses with regards to pressure ulcer prevention. On the other hand, the students who were still working part-time as nursing auxiliaries maintained that nursing auxiliaries were not taught a great deal about pressure ulcers apart from repositioning patients at the time this study was undertaken.

**Pre-registration education on pressure ulcers**

Everyone that took part in this study said that the pre-registration education that they received on pressure ulcer prevention had not sufficiently emphasised its importance, which had left them ill equipped for clinical practice. The participants alluded that they had learnt more from their colleagues in the clinical environment about pressure ulcer prevention than in a more conventional educational setting like a classroom.
Perhaps, some of the participants overlooked the fact that their education and training occurs not only in classroom but in clinical practice as well. It is nonetheless worrying that some participants felt that what they were taught prior to their clinical practice left them ill equipped for clinical practice:

**Joanne (3rd year student):** “We just had one lecture about pressure ulcers during my training and I can’t really say that it was memorable.”

**Catherine (2nd year student):** “The training (on pressure ulcers) that I had with the tissue viability nurse on clinical placement was more engaging than that from the university.”

These accounts appear to highlight the difference between teaching and learning; that is the participants may have been taught about pressure ulcer prevention prior to working in clinical practice, but what they learnt was an entirely different matter. This difference between education and learning will be revisited later on in this chapter.

The views of the nurses and students in this study about their education on pressure ulcers are similar, even though they had been educated with different curricula in different decades. It is possible that some of the participants’ recollections about the first time that they looked after a patient with pressure ulcer may have been coloured by the passage of time. On the other hand, the participants in this study had very vivid recollections of pressure ulcer incidents dating back to the same era in clinical practice, which counter any suggestion that their recollections may have been affected by the passage of time.

The nurse and student participants’ statements about their pressure ulcer related education were disputed by the principal lecturer. The principal lecturer pointed out that the students had received a number of lectures and practical skills lessons on pressure ulcer prevention, which was also evident in the review of the current nurse education curriculum:

**Millie (Principal Lecturer):** “Student nurses are not taught about pressure ulcers as a one off topic. We introduce students to the problems of being immobile in the common foundation programme of their training. We also teach students about maintaining skin integrity during manual handling training, because manual handling is all about keeping safe and not injuring the patient or yourself. We also do lots of skills teaching and simulation that covers pressure ulcers.”

Given the apparent contradiction between the evidence from the nurses and students on one hand and the principal lecturer and the nurse education curriculum on the other hand,
perhaps the pre-registration education on pressure ulcers is ineffective at highlighting the importance maintaining skin integrity to nurses and students. Whatever the case may be, the participants’ accounts indicate that at this stage in their careers they placed a low value on pressure ulcer prevention and the care that they delivered to their patients was largely determined by others.

Having established the characteristics of the first key landmark, it is now time to consider the features of the next key landmark on a transition to a high value of pressure ulcer prevention.

4.1.2 Worst pressure ulcer ever seen

The people that took part in this study said that the next key landmark in the evolution of their values was their encounter with a patient who had the worst pressure ulcer(s) that they had ever seen. The participants’ accounts of looking after the patients with the worst pressure ulcer that they had ever seen were very rich and detailed even though in many cases these encounters had occurred many years ago. The fact these accounts evoked such vivid recollections and detailed descriptions suggest that these encounters had been salient for the participants:

Cerys (Deputy Ward Manager): “It was a bed bound, contracted lady with a very painful grade three pressure sore just above the cleft of the buttock that was tracking downwards. She was nutritionally compromised, had an infection and was dehydrated when she was admitted. She was being looked after by her son, who’d been using tea towels to pack her pressure sore because she told him not to bother anybody as she was afraid to be taken into hospital. Covering the pressure sore made them both feel better, but the pressure sore just got worse. Seeing that patient was a significant event for me because a POVA investigation was commenced against the patient’s son. It was quite sad because it was not a true case of neglect and the patient’s vulnerability was because the patient and her son wouldn’t disclose that they needed help. The issue wasn’t the damned tea towel in the wound! The son had been doing the best that he could without any help to care for his mother who he clearly loved.”

Michelle (Ward Manager): “The one that really sticks in my mind is a patient that came to us from the community where her husband was trying to look after her at home. And to keep her at home, he had to cut out a hole at the bottom of the chair, so that she could have her bowels open and have a wee into a bucket underneath the chair. When she came into Hospital, she had a grade five pressure sore that had maggots in it, unbelievable! The husband thought that he could look after her as long as she was sat in this chair, ‘cause she could have her bowels open, have a wee and
all he had to do was feed her. So of course the flies had come in as it was the middle of summer, and they had laid eggs in the pressure sore.”

The participants’ statements indicate that the people who were looking after these patients before they came into hospital were not aware of the importance of pressure ulcer prevention or indeed how to prevent pressure ulcers. This adds credence to the view that pressure ulcer prevention is a topic that is undervalued by society which is espoused by the participants and researchers like Cherry (2006) and Butler (2008). Therefore, the level of public awareness about the importance of pressure ulcer prevention is a topic that merits further investigation. If this type of research were to be undertaken, it could also explore the impact that public awareness of pressure ulcer prevention has on the care of people who are looked after by their family in the community without the involvement of any healthcare professionals.

Managing the worst pressure ulcer ever seen

Looking after patients with the worst pressure ulcer that the participants had ever seen also appears to have taught them about how to manage pressure ulcers, as aggressive and regimented treatment plans were implemented. The participants said that a wide range of measures were implemented to treat these pressure ulcers and ameliorate their impact on the patients. These measures included getting expert advice, ensuring adequate nutrition, the use of pressure relieving equipment and different types of dressings/treatments. The participants also stated that their awareness of the importance of pressure ulcer prevention was augmented by the fact looking after these patients often led to them giving evidence at POVA investigations by social services into allegations of neglect of vulnerable adults:

Gladys (Deputy Ward Manager): “The Consultant had photographs taken of all of this lady’s pressure sores because it was a POVA case and he thought that she would die that weekend. The pressure sores didn’t seem infected, but I swabbed them anyway. At this time, the patient was now semiconscious, so we got permission from her family for her to be naso-gastrically fed. She was nursed on a pressure relieving mattress and was turned two hourly religiously. Her dressings were changed twice or three times a day due to the (amount of) exudate. Her pressure sores actually started healing due to (improved) nutrition and pressure area care. The tissue viability nurse, senior nurse and social workers were also involved in her care and everything that we did was documented. Thankfully, this lady didn’t die that weekend, but it became a P.O.V.A. case and I had to give evidence to the investigation. In the end, the nursing home that she came from was closed down.”
Michelle (Ward Manager): “She had a lot of maggots in her pressure ulcer when she came to the ward, it was very infected. She had a naso-gastric tube passed so we could supplement her nutritional intake, she was on regular turns, she was on an air mattress, and she was referred to the dietician and tissue viability nurse. So we did the best that we could, but the pressure ulcer was in such a state, I have never ever seen such a horrific (pressure) ulcer in my life ever!”

This multifaceted, multidisciplinary approach to the management of pressure ulcers appears to have highlighted the importance of pressure ulcer prevention to the participants. The treatment plans that were implemented to manage these pressure ulcers seem to have shown the participants the key role that they could play in improving their patients’ pressure ulcer related outcomes. The treatment plans that were put in place also enabled the participants to learn about pressure ulcers and their management from other healthcare professionals.

The outcomes of the patients with the worst pressure ulcer ever seen

The participants’ encounters with patients with the worst pressure ulcer that they have ever seen appear to have left them with indelible experiences irrespective of the patient outcomes. In the vast majority of cases, the patient that had the worst pressure ulcers that the participants had ever seen eventually died. In a couple of cases, the patients were moved onto a different care setting before the pressure ulcer had healed. There was only one participant who said that the patient’s pressure ulcer healed completely before they were discharged from hospital:

Michelle (Ward Manager): “She died. It was probably was due to the fact that she was dehydrated and she was septic, but the fact is that her pressure ulcer was probably a large influencing factor.”

Catherine (2nd year student): “It was a difficult case, but they eventually found a care home that would take her and she went to this care home.”

Cerys (Deputy Ward Manager): “She responded really well to antibiotics, improved hydration, the dietician’s input and (the use of) pressure relieving equipment. For her, it just happened! The pressure ulcer healed and the patient and her son went home with a package of care.”

The fact that the majority of patients died despite the attempts to save their lives appears to have shown the participants that pressure ulcers can result in death, which would have reinforced the importance of maintaining the skin integrity of their patients. Even the...
participants whose patients were transferred onto a different healthcare setting or discharged home would have seen first-hand the impact that the care they delivered had on their patients’ pressure ulcer related outcomes. So, irrespective of the specific patient outcomes, the participants encounter with patients with the worst pressure ulcer that they had ever seen provided them with a unique opportunity to learn about the importance of delivering high quality, evidence based care to prevent and manage pressure ulcers alongside other healthcare professionals.

The participants’ accounts indicate that that their encounters with the patient with the worst pressure ulcers that they had ever seen had a profound impact on the value that they placed on pressure ulcer prevention. Therefore, it is important to consider the impact that exposure to high grade pressure ulcers may have on nurses’ values and practice.

4.2 The impact of exposure to high grade pressure ulcers

The participants asserted that seeing a patient with a high grade pressure ulcer had changed their views and clinical practice regarding pressure ulcer prevention. They stated that their experiences meant that they placed a different value on pressure ulcer prevention compared to their colleagues who had not looked after patients with high grade pressure ulcers.

The participants also maintained that the high value that they placed on pressure ulcer prevention meant that they were more proactive in the prioritisation and delivery of care to maintain their patients’ skin integrity than their colleagues. The people that took part in this study felt that this difference between their practice and that of their colleagues was due to the fact that they placed a high value on pressure ulcer prevention (as was discussed in the last chapter). All the participants stated that their nursing colleagues especially those who had qualified in the last ten years, did not fully comprehend the importance of pressure ulcer prevention as they had not seen the high grade pressure ulcers:

Cerys (Deputy Ward Manager): “Only physically seeing a really bad pressure ulcer makes it real, but I would hope it wouldn’t take physically seeing a wound to appreciate the importance of prevention. Perhaps it’s because I’m a bit older and I’ve seen some of these really bad pressure ulcers. The sensation of seeing a patient with a really bad pressure ulcer triggers the part of the brain that makes the memory real tight, so you’re gonna remember that patient with a pressure ulcer. It’s like if you see
someone have an accident, you say damn! And you’re gonna be making sure that you
don’t put yourself in that position where you have the same accident. But maybe it’s
only the older age group of nurses who can remember when there were really bad
pressure ulcers in hospitals and the younger nurses haven’t seen patients with really
bad pressure ulcers. When you do see a grade four (pressure ulcer) the first word that
comes to mind is suffering, that patient is suffering, damn!”

Gladys (Deputy Ward Manager): “People who come into nursing now haven’t seen
the really severe pressure ulcers and, as a result, they don’t seem to appreciate the
importance of pressure ulcer prevention due to their lack of experience. They’ve
never seen the patient with horrendous, barbaric pressure sores with bones stuck out
that people used to die of years ago. People don’t realise that patients sitting in beds
for twelve hours and not being moved leads to their tissue breaking down. These
youngsters don’t realise that you’ve then got three or four months of work on your
hands to heal that pressure ulcer and the patient stays in hospital for longer. The
young students or junior staff nurses nowadays are really lucky because they’ve got
pressure relieving mattresses as well, but they are not aware that you’ve still got to
turn the patients for comfort and (pressure) relief.”

All of the participants felt that the level of first hand exposure to high grade pressure ulcers
increased the value that a nurse subsequently placed on pressure ulcer prevention.
Everyone that took part in this study also stated that some of the recently qualified nurses
did not fully comprehend the importance of pressure ulcer prevention. This statement is a
bit surprising as the participants have different levels of experience and perform different
roles, so one would expect them to have a range of views about their peers. Perhaps, the
participants share a similar view about some of the recently qualified nurses because most
of them worked as nursing auxiliaries at some point in their careers.

A deeper examination of the participants’ accounts suggests that there may be more to
their perceptions of recently qualified nurses than is immediately apparent. There is no
direct evidence in this study which indicates that recently qualified nurses are unaware of
the significance of maintaining skin integrity. Instead, the students and the junior nurses in
this study were found to place a high value on pressure ulcer prevention, which shows that
there are some recently qualified nurses and nurses of the future who are fully cognisant of
the importance of preventing pressure ulcers. Thus, it is possible that there are different
explanations which account for the participants’ low regard for their newly qualified nurse
colleagues’ appreciation of maintaining skin integrity.
One explanation is that the participants’ view is accurate as many nurses in this study admitted that when they started working as nurses, they knew very little about how to prevent or manage pressure ulcers as has been shown in previous sections of this thesis. An alternative explanation is that the statements made by the people in this study are indicative of a negative perception of their newly qualified nurse peers arising from other issues like horizontal violence.

Horizontal violence is the non-physical hostility that the members of a traditionally oppressed group like nurses can have towards each other (Chaboyer, Najmann et al. 2001; Farrell 2001). Horizontal violence is manifest in an overt or covert manner in acts like intimidating body language, fault finding and devaluing comments that have a negative impact on the recipient’s emotional and psychological well-being (Freshwater 2000; Gerardi and Connell 2007). Robust studies have found that many students and nurses are subjected to horizontal violence, but nurses in their first year in clinical practice are often the victims (McKenna, Smith et al. 2003; Brunt 2011; King-Jones 2011). These studies used a range of research methods to explore horizontal violence in different settings, but they report similar findings. The findings of these studies also suggest that when nurses make negative comments about their peers, then the possibility that their views may be indicative of horizontal violence must be considered.

The sentiments expressed by the participants about the pressure ulcer related knowledge of newly qualified nurses can be viewed as negative and or demeaning, but there is no direct evidence of horizontal violence in this study. There may be other more viable explanations for these findings, but it is beyond the remit of this thesis to explore each and every possible explanation. Therefore, it is clear that the participants’ opinions about the pressure ulcer related knowledge of newly qualified nurses must be interpreted carefully because they are not underpinned by any direct evidence.

The participants also maintained that the more experience that a nurse had of looking after patients with high grade pressure ulcers, the more inclined they would be to subsequently undertake measures to protect the skin of their patients. This assertion also implies that there may be a relationship between the value that a nurse places on pressure ulcer prevention and the skin care that they give to their patients. The participants also cited
other reasons why they thought their colleagues; especially the recently qualified nurses did not place an appropriate value on pressure ulcer prevention. It was felt universally that there were an increasing number of newly qualified nurses who felt that pressure ulcer prevention was not part of their job:

Cordelia (Senior Staff Nurse): “Some of these newer Project 2000 nurses that are coming up now and have got their degrees and qualifications, think that it’s not their job; it’s the auxiliary’s job to prevent pressure ulcers. I’m old fashioned and I’ve been a nurse long enough to think that it’s not just the auxiliary’s job, but it’s my job as a qualified nurse to prevent pressure ulcers. I think that you need to learn on the job, you need to care for the ill patient as well as care for the patients who have recovered from their illness so that you can learn about the illnesses, and learning on the job is what nursing is all about.”

The participant’s account suggests that a nurse’s values attitude and belief about pressure ulcers can affect the skin care that patients receive. This account also alludes to the fact that the participants felt that nurses and students learn more about the importance of pressure ulcer prevention by looking after patients in clinical practice than in the classroom.

Perceptions of fundamental or essential nursing care

Some of the participants in this study felt that a lack of emphasis on the importance of pressure ulcer prevention like other aspects of essential nursing care in the nursing curriculum had contributed to a reduction in the awareness of its importance:

Gladys (Deputy Ward Manager): “Everyone should be educated enough to understand the significance of pressure ulcer prevention, but it all goes back to their training, what are the colleges teaching these students?! Perhaps it’s because the incidence of pressure sores and the number of bed sores has gone down in hospitals, so perhaps they (the colleges and universities) think that it’s not appropriate to be giving nursing students this sort of information. But basic nursing care is prevention of pressure sores.”

The principal lecturer maintained that it was not acceptable for nurses or students to have these views on pressure ulcer prevention or other aspects of essential nursing care. She stated that if any students holding such views were identified by the university, then they were made to change their views. Unfortunately, she did not specify how they were made to change their views or what happened to them if they did not change their views:

Millie (Principal Lecturer): “Some people feel that essential nursing care is not part of the registered nurses’ role, but this attitude is totally unacceptable. Academic
qualifications do not excuse people from direct patient care; the patient is the focus of everything that we do. I don’t know where they get these attitudes about qualified nurses and essential care from! These attitudes certainly do not come from us or clinical practice I can assure you, so they must come from the students themselves. If students have those attitudes either they see the error of their ways or they should not be on this course.”

There is a disparity between the views of the nurses in clinical practice and the principal lecturer about the attitude of some students and nurses towards fundamental nursing care. The views expressed by the hospital based participants suggest that they are not aware of what students are being taught about looking after patients when they are in the university. This is because these participants feel that students are not being provided with enough education about the fundamental aspects of nursing care like pressure ulcer prevention. The hospital based participants asserted that this gap in education resulted in some students and nurses believing that fundamental aspects of nursing like pressure ulcer prevention were not their responsibility.

The principal lecturer stated that the importance of fundamental aspects of nursing was highlighted to all students in university, prior to their deployment to clinical practice. So, in her view there was no reason for any students to have a negative attitude towards fundamental aspects of nursing care like pressure ulcer prevention. The principal lecturer admitted that she had come across some students who mistakenly believed that nurses were not responsible for delivering fundamental care to their patients, but she pointed out that once these students were identified they were shown that delivering essential nursing care was a key part of a nurse’s responsibilities.

The dichotomy between the hospital based participants and the principal lecturer’s view is mirrored in the results of other studies and expert opinion. Studies have found that there are some nurses and students who feel that fundamental nursing care which involves direct patient contact like pressure ulcer prevention is not a nurse’s responsibility (Kalisch 2006; Allan and Smith 2009). These findings are based on qualitative studies in the US and UK that were undertaken with different objectives, but reported similar findings. This suggests that the findings of these studies are worth noting, even though qualitative studies can only be applied to other settings to a limited extent. The findings of these studies add credence to
the assertions made by the participants in this study that there are some nurses and students who do not think that fundamental nursing care is a nurse’s responsibility.

These two studies also reported other findings which appear to be relevant to the statement made by the participants. The UK study found that when students were in clinical practice they observed that nurses focused on the technical and organisational aspects of their role, while the majority of essential nursing care was delivered by nursing auxiliaries (Allan and Smith 2009). This was thought to have resulted in some students believing that essential nursing care was not a nurse’s responsibility because they had not seen any nurses delivering this type of care in clinical practice (Allan and Smith 2009). In other words, the researchers that undertook this study hypothesised that students learn from more experienced nurses and if they see that nurses do not deliver some aspects of nursing care; then they will probably conclude that these aspects of care are not the responsibility of the nurse. This appears to be a logical explanation for why there are some nurses and students who believe that the delivery of fundamental nursing care is not a nurse’s responsibility, but there may be other factors at play.

There is some evidence which shows that the role that nurses play in the delivery of essential care is influenced by other factors. The US study reported that nurses were more likely to omit the aspects of patient care that they considered to be the most time consuming like patient repositioning when they were short staffed (Kalisch 2006). This raises the possibility that students do not see nurses in clinical practice delivering fundamental nursing care because they are too busy dealing with other things.

A review of studies on clinical decision making for the Welsh NHS identified that there was an inherent tension between direct patient care and technical and organisational aspects of care (Hawley, Stilwell et al. 1993). This review also found that the tensions between direct patient care and the other aspects of patient care can be exacerbated in clinical practice because nurses are under pressure to achieve certain objectives by people who not always aware of how these objectives affect patient care (Hawley, Stilwell et al. 1993). This review may be dated, but it highlights the fact that it is difficult for nurses to focus on both direct patient care and the technical and organisational of patient care because they make conflicting demands on a nurse’s time. Thus, it is also possible that nurses do not participate
in the delivery of fundamental nursing care because they are preoccupied with delivering other aspects of patient care.

The participants’ accounts and the findings of other studies suggest that the challenges of clinical practice have effectively resulted in the division of nursing care between nurses and auxiliaries. To put it simply, the evidence that is available suggests that nurses mainly focus on the managerial and technical aspects of patient care; while the essential care is largely delivered by nursing auxiliaries. This is not necessarily a bad thing, as nurses are entitled to delegate different aspects of patient care as long as the person who delivers the care is competent to do and is adequately supervised (NMC 2008a). Unfortunately, the delegation of the majority of fundamental nursing care to nursing auxiliaries appears to have result in some people mistakenly believing that fundamental nursing care is not part of nurse’s role as highlighted by Kalisch (2006) and Allan and Smith’s (2009) studies.

A number of different theories have been promulgated to explain why some students and nurses think that the delivery of essential nursing care is a not a nurse’s responsibility. One view is that the delivery of the technical and organisational aspects of care by nurses has resulted in these aspects of patient care acquiring a high status, while the fundamental care delivered mainly by nursing auxiliaries has gained a low status (Allan and Smith 2009). This is supported by the statements that are made by the participants in this study that the differential prestige of different nursing intervention influences the manner in which some nurses prioritise and deliver different aspects of patient care (as highlighted in the previous chapter).

An alternative explanation is that changes to the nurse education curriculum have inadvertently resulted in a dichotomy between theoretical and practical learning, which has contributed to the view that nurses do not have to deliver hands on care to their patients (Allan and Smith 2009). The existence of a divide between theoretical and practical learning is something that is alluded to by the students in this study who stated that they learned more about preventing and managing pressure ulcers in clinical practice than they did during lectures. The principal lecturer argued that this hypothesis was untenable because it overlooked the fact that theory and practice are synchronous concepts in nurse education. The nurse education curriculum for the students that took part in this study also showed
that they had been provided with the same information about the maintenance of skin integrity in university that they received in clinical practice. This suggests that there is more to helping students to understand the importance of pressure ulcer prevention and other aspects of essential nursing care than providing them with education.

The idea that the reluctance of some students and nurses to participate in essential care is somehow due to their supernumerary status or the current format of nurse education is viewed as unfortunate and by misguided nurse researchers like Waterlow (2003) and Allen and Lyne (2006). This take on the current nurse education curriculum is viewed as being misguided because it overlooks the fact that prior to the restructuring of nurse education, nurses were little more than doctors’ servants and they often initiated treatments that endangered the patients that they were looking after (Griffiths 2008). The latter point appears to have some merit as the more experienced participants in this study recalled times when they coated pressure ulcers with egg whites or blew oxygen into them, in a bid to promote healing.

A detailed examination of the criticisms of the manner in which nurses are trained by some of the participants in this study also raises a few issues. Beneath this carapace of criticism of the current form of nurse training, lies the suggestion that academic nurse education somehow disabuses people of an innate ability to care for patients (Allen and Lyne 2006; Griffiths 2008). This view is not only intellectually untenable, but it also conveniently circumvents the fact that many of the challenges in clinical practices are due to the fact that nurses are being asked to deliver an ever increasing amount of care with a diminishing amount of resources (Allen and Lyne 2006). So, it is no surprise that this negative view of academic nurse education is popular because it obviates the need for the critical examination of what nursing is about and what aspects of care nurses should deliver.

This unfortunate view about nurse education appears to be widely held and is epitomised by slogans about students and nurses like “too clever to care” and “too posh to wash”, which are bandied about in the media (Scott 2004; Griffiths 2008). The view that the current nurse education curriculum is producing nurses who are not interested in fundamental care was bolstered by the fact that it was the subject of a motion at a RCN Congress. Unfortunately, little or no attention is paid to the fact that most of the nurses (95%) at this
RCN congress felt that nurses should still be involved in direct patient care (Scott 2004; Griffiths 2008). Critics of the current format of nurse education like slogans like “too posh to wash” which appear to capture the imagination of the public, but they overlook the fact that these slogans are ultimately harmful to nursing because they reinforce the deep seated view in certain quarters that nursing is a profession that does not require any education or intelligence (Scott 2004; Allen and Lyne 2006).

The view that the reluctance of some students and nurses to take part in essential care is not due to shortcomings in the nurse education curriculum is also supported by evidence from other sources. The examination of the nurse education curriculum for the students that took part in this study confirmed that all the students were taught about the importance of fundamental nursing care on many occasions in lectures and clinical skills sessions before they went on their clinical placements. This suggests that students are taught about the importance of essential nursing care in their training, but this education does not appear to be changing the views of all students as there are some who believe that fundamental nursing care is not a nurse’s responsibility.

There are different explanations for why there are some students and nurses who believe that essential nursing care is not a nurse’s responsibility. Despite this, the only explanation that is underpinned by research evidence is that students and nurses believe that essential care is not a responsibility of a nurse is because it is largely delegated to nursing auxiliaries, while nurses concentrate on other aspects of patient care. This explanation is based on studies which report that nursing care in clinical practice is often divided into hands-on nursing care which is delivered by nursing auxiliaries while nurses concentrate on other more technical and administrative aspects of nursing (Irurita 1996; Bowers, Lauring et al. 2001; Allan and Smith 2009). These studies report similar findings about the division of nursing care in clinical practice even though they recruited participants from a various settings and used different research methods.

This explanation for the view that some nurses and students have of essential nursing care is supported by the findings of different studies, but there are other subtle points that are worth noting. Firstly, the studies which underpin this explanation show that this division of nursing care is due to the pressure that nurses are under to get as much done during their
shift as possible. This explanation also overlooks the fact that nurses are allowed to delegate different aspects of patient care as they see fit, but they are still responsible for all aspects of patient care (NMC 2008a; 2008b). Taking these subtle factors in account leads to the more nuanced conclusion that the manner in which care is delivered in clinical practice has resulted in some in the nursing profession coming to the incorrect belief that the delivery of fundamental nursing care is the responsibility of nursing auxiliaries.

**Importance of patient outcomes**

The participants said that looking after patients with pressure ulcers had increased the value that they placed on pressure ulcer prevention because they were able to see first-hand the impact that the measures they implemented had on patient outcomes. The reward of seeing a high grade pressure ulcer healing was also cited as a tremendous motivating factor for nurses. The participants felt that a lack of experience of looking after patients with pressure ulcers was one of the reasons why some nurses place a low value on pressure ulcer prevention:

Cerys (Deputy Ward Manager): “Most of the patients with grade four pressure sores that I have looked after have been POVA cases. Healing a patient’s grade three or four pressure sore is very rare, but when it happens, it is so special that it strengthens your resolve to keep going when you come across patients with them. For most people a grade three or four pressure sore is a chronic problem that takes a long time to heal. But the patients don’t stay with us long enough for us to follow their outcomes through because we are acute medicine. But having patients with pressure ulcers is good, because you are on top of your game as you gain experience of dealing with this type of patient holistically and not just managing their pressure area.”

Gladys (Deputy Ward Manager): “The more recently qualified nurses or the more recent students don’t value pressure sore prevention as much as perhaps older generations do because of naivety and inexperience. You come out of college a bit green, you’ve had so much information bombarded into you and you go on a ward. And you’re nervous, you’re apprehensive, you wanna do your best, (but) you’ve got lots of things going on. You’re frightened if a patient has a cardiac arrest; you’re frightened if a patient collapses, so perhaps (because) there are so many other things going on these recently qualified nurses are not aware of pressure relief.”

The link between the experience of looking after patients with a pressure ulcer and the value subsequently placed on pressure ulcer prevention was also evident in the participants’ accounts of their personal experiences and their influence. The participants stated that their
current practice with regards to the maintenance of skin integrity was strongly influenced by their previous experiences of looking after patients with high grade pressure ulcers, even though the types of patients that they looked after had changed:

Helen (Deputy Ward Manager): “We don’t see as many really bad pressure sores as we used to because of the (pressure relieving) equipment that we’ve now got. But the pressure sores we used to see years ago mean that you’ve always got it in the back of your mind that a grade one pressure ulcer can develop into a grade four pressure ulcer in no time at all.”

The participants’ statements suggest that first-hand experience of looking after patients with pressure ulcers increases the value that a nurse places on pressure ulcer prevention and the manner in which they subsequently deliver skin care to their patients. One of the factors that appear to influence the value that nurses place on pressure ulcer prevention is nurses realising the impact that they can have on the pressure ulcer related outcomes of their patients. The participants’ accounts indicate that this realisation mainly occurs when nurses have the opportunity to look after patients with a pre-existing high grade pressure ulcer. Thus, experience of looking after a patient with a high grade pressure ulcer appears to increase the value that a nurse subsequently places on pressure ulcer prevention because it shows them what impact they can have on a patient’s pressure ulcer related outcomes. The increased value that a nurse places on pressure ulcer prevention is also said to be evident in the manner that nurses deliver skin care to their patients.

The participants’ statements about the relationship between first-hand experience of looking after patients with high grade pressure ulcers, patient outcomes and the value subsequently placed on pressure ulcer prevention are also worth noting for another reason. These statements indicate that the value that a nurse places on pressure ulcer prevention appears to be primarily influenced by their prior experiences of looking after patients with pressure ulcers for a number of reasons.

The experience of caring for a patient with a high grade pressure ulcer appears to highlight the consequences of pressure ulcer formation for the patient and their families to the nurse who is looking after them. This experience also appears to highlight some of the professional issues that can arise from pressure ulcer formation for the nurse, like taking part in a POVA investigation into how a patient developed a pressure ulcer.
4.2.1 Post-registration education and training

Every nurse that took part in this study stated that they had learned the most about pressure ulcers when they had qualified. These participants felt very strongly that their post-registration graduate education had improved their knowledge about pressure ulcer prevention and management, which was invaluable in their everyday clinical practice. The nurses in this study also stated that their post registration education had affected their practices so profoundly, that they felt inspired to make concerted efforts to further their knowledge on pressure ulcers:

**Helen (Deputy Ward Manager):** “I enjoyed every minute of my post registration pressure sore courses and they have equipped me well for my current role. My knowledge about pressure sores is something I built up over the years through my wound care diploma and buying books. Now I just try and keep myself updated by collecting articles and journals.”

**Victoria (Staff Nurse):** “I find that the information I get from these (post-registration) pressure sore study days is useful. Because as much as we know about pressure sores, I think (that) learning is a never ending process. I’ve been working on this ward for a while and whenever somebody has given a lecture about pressure sores, I’ve found out something new that I did not know. And I’ve been qualified for a few years now. So if I was in charge, I’d probably have more study days on pressure sore prevention.”

The difference between the participants views on pre and post-registration education appears to be due to their level of exposure to patients with pressure ulcers. It seems that nurses and students are being taught about the importance of pressure ulcer prevention in their pre-registration training, but they are not learning why it is important until they have looked after patients with pressure ulcers. Given the positive impact that post-registration education appears to have on nurses’ appreciation of the importance of pressure ulcer prevention, it important to consider what opportunities are available for further education on pressure ulcers for nurses in clinical practice.

**Opportunities for post-registration education**

The nurse participants stated they found it increasingly difficult to access post-registration education and training despite of being aware of its benefits, because of the financial pressures facing the NHS. The prevailing financial situation meant that nurses who wished to further their education had to pay for it themselves and study in their own time.
These participants maintained that the financial and personal cost to the individual nurse of pursuing post-registration study meant that most nurses (including some of the nurses in this study) were more inclined to go for the courses that they really wanted to do. Thus, the most popular post-graduate education and training courses were on the aspects of nursing that are considered to be the most prestigious; while less popular aspects of nursing like pressure ulcers were overlooked. The nurse participants felt that if the Trust provided access to post-registration educational opportunities then nurses would be more inclined to attend courses on pressure ulcer prevention and management:

**Cordelia (Senior Staff Nurse):** “Study leave throughout all the Trusts is at a premium because it seems that there’s never the money to cover the wards to give people the time to do their training. So if people have to pay for further for training themselves or do the training their own time, they are more likely to that they want to do which is likely to be a sexy topic. There would be a greater interest in things like preventing pressure ulcers if the Trust paid for people to do courses and people were able to access the courses. The nurses need to know that if they are able to access courses and study sessions that they don’t have to attend them in their own time.”

**Victoria (Staff Nurse):** “I’ve never had the opportunity to do a course, because the Trust doesn’t fund courses at college or university. I’m actually thinking about doing a course, but it’s the financial cost that stops me from doing it. If the Trust said we’ve got some money for training and we can send you off for training I’d go and do a course. But if I could get funding for training on any topic, I’d be more interested in doing a course on palliative or psychiatric care than learning about anything else.”

The principal lecturer took a different view to the nurses in this study as she argued that there were sufficient opportunities for nurses to keep their knowledge up to date. She felt that nurses needed to be more resourceful and tap into the knowledge possessed by others about pressure ulcers instead of solely relying on study days and courses. Perhaps, the principal lecturer was arguing for better use of “in house” sources of knowledge like the pharmacist, instead of always relying on sources of knowledge that cost money.

Nonetheless, her views overlooked the fact that nurses in clinical practice do not always have the time to pursue these alternative sources of knowledge:

**Millie (Principal Lecturer):** “The suggestion that nurses do not have enough education and training opportunities to keep their knowledge up to date is a load of rubbish! There’s this terrible, terrible reliance by nurses on training, what nurses’ lack is resourcefulness. Nurses never utilise the opportunities at their fingertips to learn and they seem to think that they can only learn by being trained, which is ludicrous! This attitude is ludicrous when you think of the wound care expertise that the nurses
have at their fingertips and what they can learn from people like the pharmacists, tissue viability nurses, surgeons and centres of excellence. It is within every nurse’s means to do these things, but nurses are so entrenched into the notion that they can’t do anything until they are trained and that is a terrible mind-set.”

The participants’ accounts indicate that the post-registration education on pressure ulcer prevention that a nurse receives has a powerful impact on the skin care that patient receive.

The impact that nurse education can have on pressure ulcer prevention has been highlighted by other studies. A lack of education has been found to result in nurses incorrectly assessing the risk of pressure ulcer formation, incorrectly grading pressure ulcers and not delivering the appropriate interventions to maintain their patients’ skin integrity (Lloyd-Jones, Young et al. 2003; Gunningberg 2005). Educating nurses about pressure ulcers is reported to increase their knowledge of maintaining skin integrity and result in more nurses delivering the appropriate standard of skin care to their patients (Sinclair, Berwiczonek et al. 2004; Wedge and Gosney 2005). These studies have varying levels of methodological rigour and were undertaken in different locations, but they all highlight the impact that educating nurses about pressure ulcer prevention can have on the skin care that patient receive.

The importance of educating nurses and other healthcare professionals about pressure ulcer prevention in order to improve patients’ pressure ulcer related outcomes is also highlighted in a number of guidelines on pressure ulcer prevention. These guidelines are based on systematic reviews of evidence and they recommend educating all healthcare professionals about pressure ulcers in order reduce the incidence of pressure ulcers (RCN 2001; NICE 2001a; EPUAP and NPUAP 2009a). All of these guidelines state that their recommendations are based on the best available evidence from studies and they also incorporate expert opinion where there is little or no research evidence. Therefore, the best evidence highlight the positive impact that education can have on nursing practice, which is in line with the findings of this study about the impact that post registration education on pressure ulcers has on the skin care that nurses deliver to their patients.

The participants in this study stated that the majority of care to prevent pressure ulcers in clinical practice was delegated to nursing auxiliaries and students for a number of reasons, which were discussed in the last chapter. Therefore, it is important to establish the amount
of education that nursing auxiliaries receive on maintaining skin integrity, given the role that they play in patient care.

**Education for nursing auxiliaries**

Most of the participants in this study had worked as nursing auxiliaries before they became nurses, or were working the occasional shift as a nursing auxiliary while undergoing their nurse training. All of these participants stated that when they worked as nursing auxiliaries, they had been expected to look after patients without any prior training on pressure ulcer prevention. This would appear to be a cause for concern given the fact that the majority of interventions to prevent pressure ulcers in clinical practice are said to be delivered by nursing auxiliaries.

All the participants in this study said that nursing auxiliaries should be taught about pressure ulcer prevention and management, because of their direct contribution to patient care. The participants also raised concerns about the level of responsibility that nursing auxiliaries would be expected to have for pressure ulcer prevention compared to nurses, if they received the appropriate education:

**Joanne (3rd year student):** “Giving education and training on pressure ulcer prevention to nursing auxiliaries would be a good idea, but it is putting a lot of responsibility on nursing auxiliaries. Because if there’s a problem with the patient’s skin then the nursing auxiliaries would have to act on that problem and some nursing auxiliaries do act automatically anyway, but others just do nothing. But education and training on pressure ulcer prevention should be offered to nursing auxiliaries to prevent these pressure ulcers happening to the patient, ‘cause we’re all here for the patient at the end of the day.”

**Millie (Principal Lecturer):** “We can’t get away from the fact that healthcare assistants are on the increase because a lot of the (healthcare) organisations around us are looking for ways of economising and qualified nurses are a very expensive commodity. There are dangers in training unqualified healthcare professionals because the boundaries are blurred between what unqualified nurses do and what qualified nurses do. But if care is given by a team of nurses then healthcare assistants are just as important as qualified nurses. The unqualified nurses may well as be educated and that is something the university is already involved in.”

The participants’ views about educating nursing auxiliaries are supported by the guidelines on pressure ulcer prevention, which recommend educating all healthcare professionals about this aspect of patient care (NICE 2001a; EPUAP and NPUAP 2009a).
The importance of educating nursing auxiliaries is highlighted by the findings of other studies. An observational study found that nursing auxiliaries and students delivered the majority of care to prevent pressure ulcers in clinical practice (Young, Williams et al. 2004). A Swedish cross sectional survey identified that many nurses found it difficult to correctly identify grade one pressure ulcers; which often resulted in a delay in implementing the appropriate measures to maintain skin integrity (Gunningberg and Ehrenberg 2004). The findings of these two studies indicate that educating nursing auxiliaries about pressure ulcers is important because they deliver the majority of care to maintain skin integrity in clinical practice, and also because the lower grades of pressure ulcers are challenging to identify. These two studies also show that educating nursing auxiliaries about maintaining skin integrity may result in improved pressure ulcer related patient outcomes as the appropriate interventions to maintain skin integrity can be implemented at the earliest opportunity. Thus, further research on the impact that educating nursing auxiliaries about maintaining skin integrity can have on pressure ulcer prevention in clinical practice is needed.

The participants’ statements also reveal that there are concerns about the relative level of responsibility for preventing pressure ulcers that nurses and nursing auxiliaries would have if nursing auxiliaries were taught about pressure ulcer prevention. The code of professional conduct for nurses states that nurses are responsible for all aspects of patient care (NMC 2008b). This means that the responsibility for the maintenance of skin integrity lies with the nurse.

**Appreciation of education on pressure ulcers**

The nurse participants’ accounts also indicate that there is a difference in what they learned from their pre and post-registration education on pressure ulcers. These participants said that they had not learned a great deal from their pre-registration education, while they had learned a lot about pressure ulcer prevention and management from their post registration education on pressure ulcers. Given that the same information is given in pre and post registration education albeit at different academic levels, the difference in what the participants said they learned may be due to their own level of experience. So, the participants appear to have had learned more from formal education on pressure ulcers of
formal education once they had some experience of looking after patients with pressure ulcers.

The findings of this study indicate that when nurses are taught about the importance of pressure ulcer prevention in their training, they do not fully appreciate its significance. It seems that nurses do not fully appreciate their pre-registration on pressure ulcers because they are taught about pressure ulcers before they have a chance to look after patients with pressure ulcers. One explanation for this is that when nurses start to encounter patients with pressure ulcers in clinical practice, they begin to realise why pressure ulcer prevention is important and are more willing to learn about pressure ulcer prevention. This gives rise to the theory that nurses only truly appreciate the importance of formal education on maintaining skin integrity when they have looked after patients with pressure ulcers.

The last few sections of this chapter have discussed the findings pertaining to the participants’ transition from a low to a high value of pressure ulcer prevention. These findings are novel as they have not been previously reported in any other studies. As a result, these findings will now be contrasted against what is known about value formation and evolution in the next section.

4.3 Establishing and changing values

A lot of what is known about values is based on research that has been undertaken in other fields like philosophy, psychology and business. Most of the research on values has been undertaken with surveys that sit in the middle tiers of the hierarchy of evidence. The results of these studies are worth noting but it must be noted that they have predominantly focused on people’s world values like honesty, and not the value placed on a specific issue. Nonetheless, these value studies are the best available evidence and have contributed a lot to what is known about values. Consequently, the findings of this study will be considered alongside the results of these value studies.

The formation and evolution of values is influenced by a number of factors like personal experience, socio-cultural factors and education. A number of studies have found that values are primarily formed through personal experience and only tend to change after an incident occurs that causes a person to reappraise their values (Hebel 1998; Baker 1999;
Pakizeh 2005). Research on values has also found that a person’s behaviour and personality usually changes after they encounter a situation that causes self-evaluation (Baker 1999; Seedhouse 2005; Kulig 2006). This is consistent with the participants’ accounts of the impact that looking after patients with high grade pressure ulcers had on the value that they placed on pressure ulcer prevention. In this study, the participants stated that their encounters with patients with high grade pressure ulcers resulted in changes to their values, attitude and behaviour.

Social and cultural factors can also impact on a person’s values. Empirical studies have shown that values are incessantly evolving in line with societo-cultural mores because values, society and culture are inextricably intertwined (Hall 1997; Maio and Olson 1998; Bernard 2002). The relationship between society, culture and values in this study is complex. There is little evidence of social and cultural influences in the participants’ transition from a low to a high value of pressure ulcer prevention. The value that the participants place on pressure ulcer prevention appears to primarily evolve in line with their clinical experiences of looking after patient with high grade pressure ulcers. It is also clear that the value that nurses places on pressure ulcer can only increase and does not change even when the number of patients with pressure ulcers that the patients encounter diminishes.

The initial low value that the participants placed on pressure ulcer prevention appears to be synchronous with the value that their peers and the public are said to place on pressure ulcer prevention. So, it is possible that the participants’ initial low value of pressure ulcer prevention was influenced by socio-cultural factors. This is a possibility because many of the values that are shared by the member of a given society are rarely subjected to open scrutiny because they are adopted uncritically and subconsciously at a young age (Hebel 1998; Goodwin 2001; Bernard 2002). Nonetheless, this is merely a possibility that is not supported by any direct evidence in this study.

A person’s values can also be influenced by education. Studies have shown that effective education changes people’s values because many values are held without any cognitive support, so when people are inspired to think about their values through education then their values change (Hall 1997; Baker 1999; Seedhouse 2005). Education has also been found to provide people with cognitive support for their values, which encourages them to
behave in a manner that is congruent with their values when they face challenging situations (Hebel 1998; Bernard 2002). In this study, pre and post-registration education on pressure ulcers appear to have a different impact on the value that nurses place on pressure ulcer prevention. This is surprising because the current nurse education curriculum and the curriculae for post-registration tissue viability courses deliver the same information on maintaining skin integrity, but with varying level of detail. This suggests that there is a difference in what the participants learned about pressure ulcers in their pre and post-registration education.

Learning is different from receiving education because it relies on the individual in question being motivated to take on board the knowledge that they receive (McWilliam 2007; Tuohy 2007; Daley 2008). The differences between education and learning have been highlighted in educational theory and research by educationists like Piaget and Vygotsky (Mann 2002; Tuohy 2007; Hegge and Hallman 2008). The findings of this study indicate that the ability of education to alter the value that nurses place on pressure ulcer prevention is dependent on the motivation of nurses to take on board what they have been taught.

The statements made by the participants also imply that there is a difference between learning about pressure ulcer prevention in a hypothetical situation and learning from first-hand experience. Learning from experience or experiential learning is the process by which a person learns from their experiences through reflection, introspection and self-evaluation; which in turn influences their subsequent behaviour (Houde 2007; Armstrong and Mahmud 2008). Thus, a key aspect of experiential learning is being able to reflect effectively on past experiences by asking the appropriate questions about situations that one has encountered (Horton-Deustch and Sherwood 2008; Halcomb and Peters 2009).

Perhaps, the difference in the amount of learning from pre and post registration education is due to the amount of experience that the participants had of looking after patients with pressure ulcers. If this is the case, then high fidelity simulation or simulation that accurately incorporates the realities of everyday clinical practice must be integrated into pre-registration on pressure ulcer prevention. This is because studies indicate that high fidelity simulation is an integral part of ensuring that experiential learning is effectively harnessed as an educational tool for healthcare professionals (Gulikers 2006; Hoadley 2009; D' Amour
and Guimond 2010). These studies report similar findings about high fidelity simulation even though they have their limitations and were undertaken in different countries. Hence, integrating high fidelity simulation into pre-registration education on pressure ulcer prevention merits consideration as one way of increasing what nurses learn about maintaining skin integrity from their pre-registration education. Whatever the case may be, it is clear that the participants’ accounts are consistent with what is known about how values are influenced by experience and how people learn from their experiences.

There are some values that are resistant to change even by the factors that have been highlighted thus far in this section. Some values are immune from change because they are so deeply held that the people who hold them are unaware of them and accept them uncritically (Mayton, Ball-Rokeach et al. 1994; Bernard 2002; Bourne 2002). These values cannot be changed because they are subconsciously held and the people that hold them are unable to reflect or change these values, which results in these deeply seated values effectively functioning as truisms or self-evident truths (Hall 1997; Hebel 1998; Bernard 2002). Some values are thought to function as truisms because they are values that an individual shares with their peers and as a result, they are rarely challenged (Bernard 2002; Bourne 2002). Many health related values that people hold are known to function as truisms because they tend to be subconsciously held without any cognitive support (Goodwin 2001; Pakizeh 2005). Hence, it is worth considering if there are any values that function as truisms in this study.

There is little evidence in this study that the value that nurses place on pressure ulcer prevention is a truism. At first glance, the value that the initial low value that the participants said that they placed on pressure ulcer prevention appears to be a truism because it was not underpinned by any cognitive support. This initial low value may also have been functioning as a truism as it is a value that the participants claimed to share with their peers and the general public. On the other hand, the participants’ encounters with the patient with the worst pressure ulcer that they had ever seen resulted in reflection, the creation of a cognitive framework and a change in the value of placed on pressure ulcer prevention. This is not a feature of a truism. Therefore, the value that nurses place on pressure ulcer prevention has some characteristics of a values truism.
Now that the participants’ transition from a low to a high value of pressure prevention has been evaluated against what is known about values, it is important to summarise some of the key features of this transition before moving on. The key characteristics of the different landmarks in this transition are summarised in figure 4.1 below.

Figure 4.1: The transition from a low to a high value of pressure ulcer prevention

<table>
<thead>
<tr>
<th>Seeing first pressure ulcer</th>
<th>Seeing worst pressure ulcer</th>
<th>Current practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Little or no knowledge about pressure ulcers and their prevention</td>
<td>• Shock and realisation of negative impact of pressure ulcers on patients</td>
<td>• Learning from education and training received</td>
</tr>
<tr>
<td>• Low value of pressure ulcer prevention</td>
<td>• Implementation of aggressive treatment plan</td>
<td>• High value of pressure ulcer prevention</td>
</tr>
<tr>
<td>• Less likely to undertake preventative interventions in clinical practice</td>
<td>• Learning about pressure ulcer management from other healthcare professionals</td>
<td>• More proactive in preventing pressure ulcers</td>
</tr>
<tr>
<td></td>
<td>• Realisation of the relationship between care delivered and patient outcomes</td>
<td>• Seeks further knowledge about pressure ulcer prevention</td>
</tr>
<tr>
<td></td>
<td>• POVA investigation</td>
<td></td>
</tr>
</tbody>
</table>
4.4 Nurses’ values and other aspects of patient care

The relationship between nurses’ values and care delivery that has emerged from the data in this study does not appear to be unique to pressure ulcer prevention and may also be relevant to other aspects of nursing. This is because the participants’ accounts of the relative importance of pressure ulcer prevention and other aspects of nursing suggest the value that a nurse places on different aspects of nursing influences the manner in which they deliver care to their patients.

Preventing a heart attack

The participants said that taking regular patient observations and initiating the appropriate treatment measures for patients whose observations suggested that they were at risk of a heart attack was more important than preventing a pressure ulcer. The participants stated that delivering care to prevent a heart attack was more important than care to maintain skin integrity because a heart attack was more acute and more likely to result in a death than a pressure ulcer. The participants said that the higher value that they placed on preventing a heart attack compared to pressure ulcer prevention, meant that they undertook measures to prevent a heart attack with greater urgency than those for preventing a pressure ulcer:

Michelle (Ward Manager): “A pressure ulcer is not viewed as being the same as a heart attack because it doesn’t have such an impact on the patient’s life. If the patients have heart attacks, they could die. I know that the patients could die if they had a pressure sore but death from a heart attack is more immediate as it could lead to a cardiac arrest and that is an emergency situation. So, obviously nurses link the heart attack with a cardiac arrest and see it as an emergency situation where action is required. Pressure sore prevention isn’t recognised as an immediate or emergency situation, even though it is a necessity.”

Leah (2nd year student): “People don’t really know that you can die from a pressure ulcer. They think that a pressure ulcer is just a wound that can be healed. If you look at somebody that’s having a heart attack, then you can see that they could potentially die in front of you if you do nothing. But pressure ulcers can have a slow formation, they can be dealt with at different stages, and they can be healed. So people don’t see a pressure ulcer as needing urgent attention because we can be kind and put a dressing on it, but when someone has a heart attack, people automatically think of the possibility of death if no action is taken.”

These responses indicate that the participants and their peers think that preventing a heart attack is more important than preventing a pressure ulcer. The relative importance that the participants placed on preventing a heart attack and preventing a pressure ulcer was a novel
finding of this study. The participants’ statements also suggest that the higher value that a nurse places on a specific intervention, the more likely it that particular intervention will be a high priority and the nurse will deliver that intervention.

The findings with regards to the relative importance of preventing pressure ulcers and heart attack are novel, but the implied relationship between values and actions in the participants’ accounts is congruent with what is known about values. A number of values studies report that if a person values something then they are more likely to have an active interest in it (Hall 1997; Hebel 1998; Baker 1999). These studies have largely focused on people’s world values, which is different from the value placed on a specific issue. Most of these value studies are surveys that sit in the middle tiers of their hierarchy of evidence, which suggests that their results are worth noting. Therefore, the basic premise of the participants’ views about the impact that the relative value placed on different aspects of nursing has on the prioritisation and delivery of care is supported by the evidence from values research.

**Preventing MRSA infection**

The participants had a wide range of views on the relative importance of preventing pressure ulcers and preventing MRSA infection, which has a more insidious onset than a heart attack. The majority of participants felt that their colleagues viewed MRSA prevention as being more important than preventing pressure ulcers. Different reasons were put forward as to why this might be the case namely, the amount of attention that nosocomial MRSA infections generate in the media, the risk of the nurses picking up MRSA themselves and the monitoring of MRSA prevention practices by the Infection Control Team:

**Cerys (Deputy Ward Manager):** “Nurses are more concerned about preventing MRSA and infection control than preventing pressure sores. We’re all so aware of the implications of MRSA with cross infection, ‘cause if nothing else, you wouldn’t want to take MRSA home to your family. Nurses look at preventing MRSA as THE problem, ‘cause it can even infect pressure sores.”

**Joanne (3rd year student):** “Nurses are more careful about spreading MRSA infection, whereas they aren’t so careful about things to do with pressure ulcers. The follow up of things pertaining to MRSA on the ward by the infection control people helps to raise the profile of MRSA, but we don’t see the tissue viability nurse on the ward except when we refer patients to them.”
The participants felt that their colleagues’ views on the relative importance of pressure ulcer prevention and MRSA prevention were largely consistent with the views held by patients and the general public. There was a unanimous view that patients and their families viewed MRSA prevention as being more important than pressure sore prevention due to the high profile of MRSA in the media and the risk of litigation:

Catherine (2nd year student): “MRSA is immediately on people’s minds because the patients and their families know somebody who has gotten it or they know of people who’ve got it because of the media and newspapers. Even patients with diarrhoea say to us: do you think I have MRSA?”

Leah (2nd year student): “MRSA is at the top of the scale (of importance) but the patients and their families don’t even think about pressure ulcers unless they get one because of the media coverage they get. MRSA is a huge subject because there’s a lot of litigation about it now. Look at Leslie Ash (a famous British actor); she got five million pounds compensation for a hospital acquired infection.”

The participants’ personal views on the relative importance of pressure ulcer prevention and MRSA prevention were largely at odds with the contemporary perspective. The majority of participants felt that pressure ulcer prevention was more important than MRSA prevention because pressure ulcers can be seen with the naked eye unlike MRSA:

Cordelia (Senior Staff Nurse): “Pressure sores are more in the forefront than MRSA because MRSA is an unseen element. But a pressure sore is something that you can see, you can visualise it and if somebody starts to get red areas you can see that happening.”

Leah (2nd year student): “Pressure ulcer prevention is more important than MRSA (prevention). A pressure ulcer is in your face, it’s there, it can be treated, it can be dealt with, and it can be looked after, whereas MRSA is an invisible problem. You can’t see MRSA unless it’s actually in a wound as an infection.”

At first glance, the participants appear to be confusing pressure ulcer prevention and treatment in their comparisons with MRSA infection because by the time that most pressure ulcers are visible, the skin has already started to disintegrate. Nonetheless, there seems to be a subtle underlying point about the relative importance of pressure ulcer and MRSA prevention that can be drawn from the participants’ statements. The increased visibility of pressure ulcers in comparison to MRSA infection makes it easier to tell when measures to prevent pressure ulcers have failed than when measures to prevent MRSA infection have failed. So, a detailed examination of the participants’ statements suggests that they place a higher value on pressure ulcer prevention than MRSA prevention because it is easier to tell
when measures to maintain skin integrity have failed than it is to tell when a patient gets a nosocomial MRSA infection.

There appears to be a difference in the relative value that is placed on pressure ulcer prevention compared to preventing MRSA infection by the participants, their peers and the general public. The participants’ maintained that pressure ulcer prevention should be a greater priority than preventing MRSA infection, but they felt that their peers and other members of society held the opposite view. It is possible for a person to place the same value on preventing pressure ulcers and preventing MRSA infection as they are both key aspects of patient care, but the participants’ statements imply that most people place a higher value on one aspect of patient care than the other. The participants stated that their colleagues and the general public placed a higher value on preventing MRSA infection than pressure ulcer prevention because MRSA infection had a high media profile and MRSA infection rates and the adherence to infection control policies were closely monitored by the Infection Control Team in clinical practice.

The participants put forward a different explanation for why they felt pressure ulcer prevention was more important than preventing MRSA infection. The participants said that the main reason why they placed a higher value on preventing pressure ulcers than preventing MRSA infection was due to the relative visibility of pressure ulcers compared with MRSA infection. To put it succinctly, the participants said that they placed a higher value on pressure ulcer prevention because a pressure ulcer could be seen by the naked eye unlike MRSA infection.

A number of reasons have been put forward to account for the differences in the relative value that the participants, their peers and the public place on preventing MRSA infection and pressure ulcer prevention. Therefore, the relative value that is placed on different aspects of nursing by nurses and the public is a topic that merits further investigation. This research would help to establish the extent to which the findings of this study apply to nurses working in other settings. If this topic were to be subjected to further research, it would also shed further light on the factors that affect the relative value that people place on different aspects of nursing.
The evidence from this study also suggests that understanding the relative value that is placed on different aspects of patient care and understanding the reasons for these differences is more important than establishing whether or not these reasons are valid. This is because the best available evidence indicates that the value that is placed on a nursing intervention influences the manner in which that aspect of patient care is prioritised and delivered. Therefore, understanding the value placed on a nursing intervention and the rationale underpinning this value offers the greatest prospect of influencing the care that patients receive. This is perhaps the most compelling reason why the findings of this study must be subjected to scientific scrutiny in other settings if patients are to receive the highest standard of nursing care.

The participants’ statements about the value that is placed on MRSA prevention also highlight the differences between their values and those of their colleagues and the general public. The participants state that their colleagues and the public feel that preventing a heart attack and preventing MRSA infection are more important than preventing a pressure ulcer. All of the participants maintained that preventing a pressure ulcer is less important than preventing a heart attack but is more important than preventing MRSA infection. This indicates that there is a disparity in the relative value placed on different nursing interventions by the participants, other nurses and the public.

The disparity in the values of the participants, their peers and the public is a novel finding in terms of pressure ulcer, values and nursing research. This difference in values that is evident in participants’ accounts can be accounted for by the results of empirical value studies. A person’s values have been shown to be susceptible to socio-cultural influences, but they are primarily formed through personal experiences (Hebel 1998; Goodwin 2001; Pakizeh 2005). This raises the possibility that the differences in the relative value placed on different nursing interventions by the participants, their colleagues and the public are due to variations in their experiences of looking after patients.

The participants’ accounts also indicate that the relative value placed on different aspects of patient care by some nurses is consistent with the values of the general public. This is also consistent with the relationship between socio-cultural factors and a person’s values that has been identified in empirical studies. The participants’ accounts about the relative value
of delivering care to prevent a heart attack, MRSA infection and pressure ulcer formation also serve to reinforce one of the hypotheses that emerged from this grounded theory. That is the statements made by the participants show that higher the value that a nurse places on a specific aspect of nursing care, the greater the priority it becomes and the more likely it is that the nurse will deliver that aspect of care.

**Fundamental nursing care**

The participants argued that their nursing colleagues also placed a low value on pressure ulcer prevention and all the other aspects of basic, essential or fundamental nursing care. They stated that even though basic nursing care was at the core of what nursing is about, this was not reflected in its position on the contemporary nursing agenda:

**Joanne (3rd year student):** “Basic nursing care should be at the top of the nursing agenda! But it’s probably somewhere in the middle of the nursing agenda because of the government’s decision to tighten their grip on funds as the NHS is run like a business now. The managers are even counting the number of plasters we use now and they say we shouldn’t use too many disposable flannels and all that sort of rubbish!”

**Millie (Principal Lecturer):** “Essential, basic or fundamental care, whatever you want to call it, is undervalued ‘cause it is hard work, repetitive, unglamorous and unsexy. For example, pressure ulcer prevention is essential care but you don’t see it in the media and patients do not appreciate it because pressure ulcers affect mainly elderly patients and anything to do with the elderly is seen as unsexy by society. But the way nursing has organised itself has contributed to the devaluing of essential care, because there are less qualified nurses and there is a huge emphasis on other things in nursing because of economic demand.”

The participants said that fundamental nursing care could be defined as care that made a difference to the patient’s wellbeing and outcomes. They also maintained that not all nurses were proficient at the delivery of basic care, even though all nurses are expected to be able to deliver it:

**Millie (Principal Lecturer):** “Essential or fundamental care is the things that make a difference to patients. Essential care is physical comfort, emotional wellbeing, being kept clean, being comfortable and free from pain. Essential care also includes making sure that a patient is clean, their hair is washed and styled, they’ve got their teeth in, they have their make up or cologne on and the patient’s bed space is tidy. Fundamental care is also about the patient’s ability to ask questions and challenge things as well as implementing the appropriate high tech interventions to ensure that patients recover, ‘cause that’s as essential as somebody cleaning your teeth.”
Michelle (Ward Manager): “Not everyone can deliver good basic nursing care. Not everyone can feed a patient, not everyone realises that the patients need to be turned and not everyone realises that you need to know when a patient has had their bowels open. That is nursing to me.”

The participants’ accounts indicate that the low value placed on basic nursing care and pressure ulcer prevention by some nurses may result in these aspects of patient care being a lower priority than other aspects of nursing in clinical practice. This suggests that the relationship that between value and care delivery that has emerged from this grounded theory with regards to pressure ulcer prevention may be applicable to other aspects of nursing.

The terms basic care, essential care and fundamental care are used to refer to the same aspects of patient care that are viewed as comprising the essence of nursing. In recent times, the term basic care has fallen out of favour and the terms essential or fundamental care are more widely used. This is largely due to the fact that the term basic conjures up images of something that is simple and easy to do, which has led to basic care being misconstrued as something that is so easy to do that it can be done by anyone. The term basic care actually refers to aspects of patient care that are at the heart of nursing and should be performed by all nurses irrespective of the setting that they work in. Therefore, the terms essential or fundamental care are now more widely used to refer to the key aspects of patient care that all nurses are expected to deliver. This is because the terms essential care and fundamental care are felt to better highlight the integral nature of these aspects of patient care to nursing practice than the term basic.

The semantic distinction between the terms basic care and essential or fundamental care may appear to be a bit pedantic, but it may also be important for other reasons. Words are merely containers of meaning, which means that the same word can have a wide range of meanings for different people (Bernstein 1971; 1975; 2000). This characteristic of words has been highlighted in a number of linguistic and educational studies, which suggests that in everyday life what a person construes to be the meaning of a word is of greater significance than the actual the definition of that word. A person’s understanding of the meaning of a word is also important because the meaning of words often changes in everyday usage before their formal definition is altered to reflect their new uses. This raises the possibility
that the shift away from the term basic care to essential or fundamental care is a reflection of changes in the perceived meaning of the word basic care.

The participants’ statements about the similarities in the low value placed on pressure ulcer prevention and essential nursing care also highlight other issues. The importance of essential nursing care like pressure ulcer prevention has been highlighted in a number of policies and guidelines that underpin clinical practice, like the Essence of Care (D.H 2001; D.H 2007) in England and the Fundamentals of Care (Welsh Government 2003) in Wales. The delivery of essential nursing care in clinical practice is also highlighted as an integral part of ensuring that patients achieve the best possible patient outcomes in other publications that influence nursing practice throughout the UK like the State of the Art Metrics for Nursing (Griffiths, Jones et al. 2008), High Quality Care for All (D.H 2008a) and High Impact actions for Nursing (NHSIIAI, RCM et al. 2009).

All of these documents are based on systematic reviews of studies on different aspects of nursing. Therefore, the recommendations for practice that are set out in these documents are worth noting because they are predicated on the best available evidence. Given the continued emphasis on essential care in policies and guidelines, one would expect that this aspect of patient care would have risen to the top of the nursing agenda. However, the participants stated that all the policies, guidelines and initiatives to highlight the importance of fundamental care and move it up the nursing agenda had been largely ineffectual:

Millie (Principal Lecturer): “Campaigns like the Fundamentals of Care campaign haven’t really changed people’s views of basic care. These campaigns have only created new senior nurses who are now walking around with the title fundamentals of care nurse. You can’t see any evidence of a return on that investment in those campaigns for nurses at the bedside.”

The participants’ accounts also suggest that the renewed emphasis that has been put on fundamental care through policy and guidelines have had very little impact on the value that some nurses place on fundamental nursing care in comparison to other aspects of patient care.

The implicit (high) value that is placed on essential care in the policies and guidelines that underpin nursing practice does not appear to be evident in the care that some nurses deliver to their patients. This might be due to the existence of some factors in clinical
practice which prevent nurses from delivering an appropriate level of care to their patients. This is a distinct possibility given the participants’ accounts about the impact the environmental factors have on their ability to deliver care to prevent the disintegration of their patients’ skin. It is also possible that there are some nurses who do not deliver an appropriate level of care to their patients because they value that they place on fundamental care is lower than that which is implied in nursing policy and guidelines.

There may be other reasons which explain why some nurses are said to deliver fundamental care in a manner that is inconsistent with nursing guidelines and policy which are yet to be identified. Therefore, the delivery of fundamental care in clinical practice must be subjected to further scientific scrutiny to determine the extent to which the results of this study can be applied to other settings and if there are any alternative explanation for the reported discrepancy between policies on fundamental care and the care that patients receive.

The findings that have been discussed in this section about the relative importance of pressure ulcer prevention and other aspects of nursing have not been identified in any other research. Despite this, these findings appear to be broadly consistent with the evidence from values research with regards to the relationship between values and actions. The participants stated that they placed the highest value on preventing a heart attack, then preventing pressure ulcers and lastly preventing MRSA infection. The participants also stated that when they are in clinical practice, their foremost priority out of these three aspects of nursing is to prevent a heart attack. This raises the prospect that participants prioritise and deliver care to their patients in a manner that reflects the value that they place on different aspects of nursing, but this must be subjected to further research before any definitive statements can be made. This is vital because the evidence in this study only implies that the manner in which nurses deliver care to their patients reflects the value that they place on different aspects of nursing and there is no direct evidence that this is the case.

The manner in which the participants prioritise and deliver different aspects of care seems to be in line with the best available evidence as preventing a heart attack is arguably a greater emergency than the other aspects of nursing which have been cited. It is more challenging to state if the relative value that they place on different aspects of nursing is
appropriate as this is topic that has not been subjected to any research or intellectual debate. Therefore, this is another finding of this study that merits further investigation in subsequent research, which will help to establish the extent to which the results of this study can be applied to other settings.

Now that all the findings of this study have been discussed, it is time to consider the core category and model of grounded theory that emerged from this study.

4.5 The core category

A wide range of findings have been discussed, but there is only one core category and grounded theory that emerges from this study.

The identification of a core category in a grounded theory study is important for a number of reasons. A core category is at the heart of a grounded theory because it explains the social phenomenon that is occurring in the participants’ reality and it accounts for the majority of the differences that lie in the data (Strauss and Corbin 1990; Corbin and Strauss 2008). In the latter stages of data analysis in this study, three potential core categories emerged which are highlighted in appendix 21 on page 278. As the data analysis progressed, the researcher attempted to integrate a grounded theory around each of the three potential core categories. Ultimately, only one of these core categories was sufficiently verified by the data to facilitate the induction of a grounded theory.

The core category which emerged in this study also fulfilled the criteria for a core category in a robust Straussian grounded theory, which are set out in table 4.1 overleaf.
Table 4.1 Criteria for a robust core category

Adapted from Strauss and Corbin (1998a), Benton (2000), Schreiber (2001a) and Corbin and Strauss (2008).

1. It is central to the theory
2. It accounts for the majority of differences in behavioural patterns
3. It is a recurring item in the data
4. It is clearly related to most of the other categories
5. Its properties and exact nature take longer to define than those of more peripheral categories
6. It has very clear implications for the grounded theory
7. The generation of a theory advanced once it is discovered and its properties identified.

The core category in this study that explains the central process that is occurring in this study is the value that a nurse places on pressure ulcer prevention. In other words, a nurse’s perception of the value of pressure ulcer prevention was chosen as the core category because the evidence suggests that it is a strong influence on their behaviour, attitudes and actions with regards to the maintenance of skin integrity of their patients.

The properties and nature of this category took longer to define than those of other categories but its primacy to this grounded theory is verified by the data in this study. The participants’ accounts show that the value that nurses place on pressure ulcer prevention is a powerful influence on the manner in which nurses prioritise and deliver skin care to their patients. It is also clear that there are other factors in clinical practice like bed management which affect the manner in which skin care is delivered. Despite this, the evidence indicates that the participants always delivered care to prevent pressure ulcers to their patients which was in line with their values irrespective of the challenges that they faced in clinical practice, even if this meant delegating some aspects of patient care. This latter point underscores the fact that the value that a nurse places on pressure ulcer prevention is the core category in this study.
Straussian grounded theory dictates that a core category is labelled as a gerund or a word ending in “ing” (Strauss and Corbin 1990; 1998b). So, the researcher focused on describing the properties and qualities of the core category in this study in order to identify an appropriate name. This culminated in the core category the individual perception of the value of pressure ulcer prevention as the gerund “working according to the value placed on pressure ulcer prevention”. The process of describing the properties and qualities of the core category also resulted in its identification as a basic social process.

Basic social processes are core categories which have a number of unique properties. A basic social processes is a core category that has multiple states of being and possesses a processual nature (Schreiber 2001a). Basic social processes also account for changes that can occur in a range of specific conditions, contexts and areas over time; thus providing density to the theory that is created (Eaves 2001; Goulding 2002). A basic social process can either relate to the changes that occur over time to the organisation of social behaviour or the simplest form of the participants’ action(s) within the situation of concern in a study (Eaves 2001; Morse 2001; Goulding 2002). Therefore, it is important to ascertain when a core category is a basic social process because it provides an additional layer of depth to the theory that is generated.

The core category in this study was identified as a basic social process for a number of reasons. The evidence indicates that working according to the value placed on pressure ulcer prevention is processual, exists in more than a single state and evolves over time, in line with the participants’ experiences and values. In other words, the participants’ statements indicate that the skin care that they delivered to their patients was primarily determined by the value that they placed on pressure ulcer prevention throughout the tenure of their careers. This relationship between values and care delivery is particularly evident in the participants’ accounts of the manner in which the skin care that they delivered changed as the value that they placed on pressure ulcer prevention evolved. Therefore, the core category in this study possesses all of the recognised properties of a basic social process.
The nature of this basic social process

The core category in this study is a basic social process, but it is important to clarify its exact nature because there are different types of basic social processes. The two types of basic social processes that exist in social sciences are the basic social psychological process and the basic social structural process (Backman and Kyngas 1999; Streubert and Carpenter 1999a; Morse 2001). The difference between the two is that a basic social psychological process is something that occurs to individuals, while the basic social structural process refers to alterations in the structural arrangements of a society (Backman and Kyngas 1999; Streubert and Carpenter 1999a). This means that a key part of identifying the nature of a basic social process is ascertaining the impact of contextual and environmental factors on the nature and direction of that social process (Backman and Kyngas 1999; Eaves 2001; Morse 2001). So, the researcher focused on identifying the impact of these factors on the nature and social process at the heart of this grounded theory.

The core category in this study has elements of both types of basic social processes. The participants all spoke of delivering skin care in a manner that was congruent with the value that they placed on pressure ulcer prevention, which is consistent with a basic social psychological process. The participants’ accounts also showed how the value that they placed on pressure ulcer prevention had been increased in a process which had the characteristics of a basic social structural process. To put it simply, the participants said that as they gained more experience of looking after patients with pressure ulcers; the value that they placed on pressure ulcer prevention had increased. The participants’ views about nurses who place a low value on pressure ulcer prevention suggest that these nurses also attempt to deliver patient care in line with their values in a basic social psychological process. It must be acknowledged that the practice of nurses with a low value of pressure ulcer prevention was not objectively confirmed, because none of the participants in this study were found to place a low value of pressure ulcer prevention.

Even though this core category has elements of both types of basic social processes, the evidence suggests that it is predominantly a basic social psychological process. This is because the majority of evidence in this study relates to the manner in which the value that an individual nurse places on pressure ulcer prevention and the impact that this has on the
skin care that they deliver to their patients. The fact that the core category in this study is basic social psychological process, but has some elements of a basic social structural process adds an extra layer of richness and depth to the grounded theory in this study. This is because it highlights subtle nuances of the grounded theory in this study by explaining the relationship between the value that nurses place on pressure ulcer prevention and the skin care that they deliver in a number of different conditions and contexts. With this in mind, it is time to consider the model of this grounded theory.

The model of grounded theory

A Straussian grounded theory is normally summarised into a visual model which summaries how it works. The presentation of a Straussian grounded theory in the form of a visual model is important because it enables the people who encounter the theory to understand how the theory works and how it relates to the phenomenon under investigation (Strauss and Corbin 1990). An effective visual model of a Straussian grounded theory enables the reader to understand the central process of the study, but it is not a scientific model of how something works and it must be treated accordingly (Strauss and Corbin 1998b). Therefore, the theory that emerged from this study was summarised into a visual model in order to provide the reader with a succinct overview of the main points of how it relates to pressure ulcer prevention.

The grounded theory that emerged from this study is that nurses work according to the value that they place on pressure ulcer prevention, but the manner in which they prioritise and deliver skin care to their patients is subject to clinical priorities and other factors. The value that nurses place on pressure ulcer prevention and ipso facto the way in which they work is strongly influenced by their past experience of looking after patients with pressure ulcers. At the heart of this model is the core category working according to pressure ulcer prevention. This model also shows the relationship between the value placed on pressure ulcer prevention, prior experience, skin care delivery and patient outcomes.

There is one visual model for the grounded theory in this study but it works in two different ways depending on the value that a nurse places on pressure ulcer prevention. When nurses place a low value on pressure ulcer prevention this grounded theory operates in a cyclical manner. This model operates cyclically because the low value that nurses place on pressure ulcer prevention
ulcer prevention gradually increases as they gain a greater insight into the role that they can play in improving a patient’s pressure ulcer related outcomes. To put it simply, as the value that nurses place on pressure ulcer prevention increases; the skin care that they deliver to their patients is consistent with the value that they place on this aspect of patient care.

Therefore, the visual model of this grounded theory is presented in a cyclical manner in figure 4.2 below in order to reflect the changes that occur in the manner in which nurses prioritise and deliver skin care to their patients as the value that they place on pressure ulcer prevention increases.

*Figure 4.2: Working according to the value placed on pressure ulcer prevention*

Once nurses place a high value on pressure ulcer prevention this grounded theory works in a different way and a different presentation of the visual model of this grounded theory is required. This is because the value that these nurses place on pressure ulcer prevention
does not diminish even if their patients have better than expected pressure ulcer related outcomes and these nurses continue to be vigilant about maintaining their patients’ skin integrity. Therefore, the best way of presenting the manner in which this grounded theory works for these nurses is in the form of a visual model with a linear format as depicted in figure 4.3 below.

*Figure 4.3: Working according to the value placed on pressure ulcer prevention*

The grounded theory in this study has been presented as a cyclical and linear visual model in order to highlight the subtle nuances which underscore its complex nature. The next few paragraphs will provide brief synopsis of each of these nuances in order to highlight why the presentation of the visual model of this grounded theory in two different formats is integral to understanding how this grounded theory works.

The evidence in this study shows that if the patient’s pressure ulcer related outcomes are consistent with the nurse’s expectation(s) then the value that they place on pressure ulcer prevention stays the same. If the patient’s outcomes differ from the nurse’s expectation, then the value which that nurse places on pressure ulcer prevention may change. The participants’ accounts reveal that if a patient has a worse than expected pressure ulcer related outcome then the value that a nurse places on this aspect of care tends to increase.

On the other hand, if a patient has a better than expected outcome with regards to skin integrity then the value that a nurse places on pressure ulcer prevention does not diminish.
In other words, the value that a nurse places on pressure ulcer prevention can only increase and once it is high it does not decrease. The unique nature of the manner in which the value placed on pressure ulcer prevention changes is epitomised by the manner in which the participants’ experiences of looking after a patient with a high grade pressure ulcer appear to have had an indelible impact on the value that they place on this aspect of patient care.

All the participants in this study were found to place a high value on pressure ulcer prevention, so the linear format of the visual model of this grounded theory depicts what was going on the participants’ world at the time the study was undertaken. This does not mean that the participants only happened to have a high value of pressure ulcer prevention at the time the study was undertaken, as the evidence shows that once a nurse places a high value on pressure ulcer prevention; this value does not diminish. This is epitomised by the fact that the clinical nurses and students in this study said that the maintenance of skin integrity was in the forefront of their thoughts when they looked after patients.

The presentation of the visual model of this grounded theory in cyclical format also neatly encapsulates key aspects of the transition from placing a low to a high value of pressure ulcer prevention, which the participants had undergone at some stage in their careers. So in summation, the visual model of this grounded theory was presented in a cyclical and linear format in order to highlight all its different facets as simply as possible.

Chapter summary and conclusion

This chapter has discussed the findings of this study that relate to the other themes that emerged from the data in this study.

The participants’ accounts indicated that they had all undergone a transition at some point in their careers from a low to a high value of pressure ulcer prevention. This transition appears to have had two key landmarks, the first time that the participants looked after a patient with a pressure ulcer and the participants’ encounters with a patient who had the worst pressure ulcer that they had ever seen. The events that occurred during these landmarks appear to have provided the participants with the impetus to seek further knowledge about maintaining skin integrity and to increase the value that they placed on pressure ulcer prevention. The transition from a low to a high value of pressure ulcer
prevention was also characterised by a change in the participants’ delivery of skin care and their receptiveness towards education on pressure ulcers.

The participants’ accounts about the manner in which the value that they placed on pressure ulcer prevention increased from high to low also appears to be consistent with what is known about the manner in which a person’s values can change. The statements made by the participants about their delivery of skin care during the evolution of the value that they placed on pressure ulcer prevention also highlight the relationship between values and actions. This is because the skin care delivered by the participants seems to have been consistent with the value that they placed on pressure ulcer prevention at various stages during their transition to a high value of pressure ulcer prevention.

The participants’ statements about the value that they placed on other aspects of nursing care also highlighted the relationship between the value placed on a specific aspect of nursing and the delivery of care to patients. These statements also revealed how care to prevent pressure ulcers is prioritised and delivered in clinical practice compared to other aspects of nursing practice. This also underscored the relationship between values and care delivery which is evident in this grounded theory.

Working according to the value placed on pressure ulcer prevention emerged as the core category after its properties and contribution to this grounded theory were identified. This core category was also identified as a basic social process because of its properties which provided greater richness and depth to this grounded theory. The relationship between the basic social process and the other themes from this study was then highlighted in the model of this grounded theory. The model of grounded theory was accompanied by a concise explanation of how it works and the relationship between each of its elements.

The grounded theory that emerged from this study is that nurses work according to the value that they place on pressure ulcer prevention. However, the manner in which they prioritise and deliver skin care to their patients is subject to clinical priorities and other factors. The value that nurses place on pressure ulcer prevention and ipso facto the way in which they work is strongly influenced by their past experience of looking after patients with pressure ulcers.
The Straussian grounded theory which emerged from this study is the best possible theory that could be inducted from the data that was obtained in the view of the researcher. This does not discount the possibility that there is another equally viable theory which accounts for the data in this study which the researcher was not able to identify. Now that all of the findings of this study have been discussed, the next chapter will summarise the main findings of this study and the rigour and significance of the grounded theory that it generated.
Chapter 5: Summary and conclusions

Introduction

The number of people who develop pressure ulcers appears to be static and nurses are still reported to be delivering poor pressure ulcer related care to their patients (Vanderwee, Clark et al. 2007; Gunningberg and Stotts 2008; Wann-Hanson, Hagell et al. 2008). In a bid to understand why nurses do not deliver the best possible care to their patients, an increasing amount of research has focused on nurses’ attitude and behaviour towards pressure ulcer prevention. This research has found that the attitude and behaviour of nurses towards pressure ulcer prevention is often incompatible with the delivery of the highest standard of care (Athlin, Idvall et al. 2010). Despite this, there is no study that has focused on ascertaining the value that nurses place on pressure ulcer prevention.

This study examined the value that nurses place on pressure ulcer prevention using an unobtrusive measure. The data that were obtained in this study revealed the manner in which this value was formed and evolved as well as the relative value that is placed on other aspects of nursing by nurses. The evidence is this study also shows that there is a relationship between the value that nurses place on pressure ulcer prevention and the skin care that their patients receive, although this is subject to other priorities and factors in clinical practice. It is acknowledged that the grounded theory that emerges from this study merits further refinement and testing especially with regards to the practice of nurses who place a low value on pressure ulcer prevention.

Each of the main themes that emerged from this study will be concisely summarised in the next section of this chapter. This will culminate in the restatement of this grounded theory that emerged from the data in this research. The following section will examine the manner in which this study fulfils the criteria for a robust and well-constructed grounded theory. The penultimate section of this chapter will consider the contribution of study to knowledge. This chapter concludes with the discussion of the recommendations for clinical practice and future research that arise from this study.
5.1 Summary of main findings

Values and care delivery

There is no research that has solely focused on ascertaining the value that nurses place on pressure ulcer prevention. A few studies that have examined different aspects of pressure ulcers and their prevention have alluded to or reported on the value that nurses place on pressure ulcer prevention. Two of these studies reported that nurses place a low value on pressure ulcer prevention (Maylor 1999; Athlin, Idvall et al. 2010). The findings of a third study suggested that nurses place a high value on pressure ulcer prevention, but this was reported to be inconsistent with the manner in which these nurses delivered skin care to their patients (Moore and Price 2004). So, this study is the first to focus solely on eliciting the value that nurses place on pressure ulcer prevention.

All of the people that took part in this study were found to place a high value on pressure ulcer prevention even though they had different levels of experience and worked in different roles and settings. The data in this study also indicated that there are some nurses who place a low value on pressure ulcer prevention. Therefore, this study is the first to provide evidence which shows that some nurses place a high value on pressure ulcer prevention, while other nurses place a low value on pressure ulcer prevention.

This research also established that there was a link between the value that a nurse placed on pressure ulcer prevention and the skin care that they delivered to their patients. The participants’ accounts indicated that nurses who placed a high value on pressure ulcer prevention were more proactive and more inclined to implement measures to protect the skin integrity of their patients than nurses who place a low value on pressure ulcer prevention. This was another novel finding of this study.

The evidence in this study also indicates that nurses attempts to deliver care to maintain their patients skin integrity in line with their values were affected by clinical priorities and other factors. The participants’ statements revealed that the manner in which they prioritised and delivered care to their patients was influenced by clinical priorities like bed management. This study found that the pressure to undertake the clinical priorities resulted in pressure ulcer prevention becoming less of a priority for nurses. Other factors like routine and ritual were found to have an impact on the manner that nurses deliver care to maintain
skin integrity to their patients. These other factors were reported to have more of an impact on the practice of nurses who place a low value on pressure ulcer prevention.

There is no study that has highlighted the impact that clinical priorities have on the manner in which nurses prioritise and deliver skin care to their patients. The impact of factors like routine, ritual and intervention prestige on the delivery of care to patients has been reported in other studies like Bowers and Lauring (2001) and Allan and Smith’s studies (2009). Despite this, there is no other study that has shed light on how clinical priorities and other factors relate to the manner in which care to maintain skin integrity is delivered in clinical practice. This means that this study has advanced knowledge by reporting novel findings and building on existing research evidence and theory to show how clinical priorities and other factors affect the care that patients receive to maintain their skin integrity.

Clinical priorities and other factors were found to affect the manner in which nurses prioritised and delivered care to their patients, such that the majority of care to maintain skin integrity was delegated to nursing auxiliaries and students. The nurses in this study said that pressure ulcer prevention was only delegated to nursing auxiliaries and students who were deemed to be competent to deliver an adequate standard of care. These participants also stated that they followed up any issues relating to their patients skin which were highlighted by nursing auxiliaries and students. There was also evidence which showed that concerns raised by nursing auxiliaries and students about the integrity of patients’ skin were not always followed up by nurses. This did not appear to include the nurses in this study who said that they made a concerted effort to take part in interventions to maintain the skin integrity of their patients, especially those who had been identified as being at high risk of developing pressure ulcers.

The impact of clinical priorities and other factors on the manner that nurses deliver skin care to their patients also raised other issues and possibilities. Firstly, it highlighted issues about the roles and responsibilities of nursing auxiliaries in the maintenance of skin integrity given the limited role that nurses appear to play in this aspect of patient care. The limited role that nurses play in pressure ulcer prevention may also explain why there is such variation in the documentation that is used to record the intervention that have been undertaken to
maintain skin integrity in different settings. It may also explain why poor pressure ulcer related nursing documentation appears to be prevalent in clinical practice, despite the implementation of a policy to improve the quality and accuracy of all nursing documentation.

The findings of this study with regards to the role that nurses actually play in the delivery of care to their patients are not only novel, but they also account for some of the findings of other studies. Poor pressure ulcer related documentation has been reported in studies by Gunningberg and Ehrenberg (2004) and Moore and Price (2004), while a lack of nurse participation in care to prevent pressure ulcers was highlighted in Young, Williams et al.’s (2004) study. The findings of this study suggest that poor pressure ulcer related documentation is so rife because nurses do not deliver many aspects of care to maintain skin integrity, so they are unable to document the skin care that patients have received accurately. The evidence from this study also indicates that nurses are unable to take part in many aspects of pressure ulcer prevention, because they are busy seeing to other aspects of nursing. This does not discount the possibility that there are other explanations for the findings that have been reported with regards to pressure ulcer related documentation and nurse participation in pressure ulcer prevention. Nonetheless, this study provides a new and plausible explanation for the results of these other studies; which highlight shortcomings in pressure ulcer related nursing documentation.

Even when nurses are able to take part in care to maintain skin integrity, other issues pertaining to the level of support received from other healthcare professionals and resource provision were found to affect the calibre of skin care that patients received. The results of this study highlighted the fact that a nurse’s attempts to maintain the skin integrity of their patients can be stymied by a lack of adequate support from other members of the MDT. This is consistent with the emphasis that is placed on the collaboration of the MDT to prevent pressure ulcers in guidelines for practice published by NICE (2001a) and the EPUAP and NPUAP (2009a). This study also brought to the fore the previously unreported role that non-traditional members of the MDT like the pharmacist and outpatient nurses can play in assisting hospital based nurses to prevent and manage pressure ulcers.
The evidence in this study shows that nurses work according to the value that they place on pressure ulcer prevention, even though the manner in which they deliver skin care to their patients is affected by clinical priorities and other factors. This is highlighted by the evidence which shows that the value that a nurse places on pressure ulcer prevention influences their motivation to implement the requisite care to maintain the skin integrity of their patients.

The impact that the value that a nurse places on pressure ulcer prevention has on the skin care that they deliver to their patients and the complex nature of this relationship has not been previously reported. Therefore, this study has advanced knowledge by bringing to the fore the relationship between the value that a nurse places on pressure ulcer prevention and the manner in which they deliver skin care to their patients.

**Value formation and evolution**

This study also reported a number of findings relating to the manner in which nurses’ values are formed and evolve, which had not been previously identified.

All the participants in this study described a transition that they had undergone from placing a low to a high value on pressure prevention. This transition was characterised by the same key landmarks, even though there were differences in the way that the participants had been trained and their level of experience. The two key landmarks in the evolution of the value that the participants place on pressure ulcer prevention were their first encounter with a patient with a pressure ulcer and looking after the patient with the worst pressure ulcer that they had ever seen.

The participants’ accounts also revealed that there are some nurses who think that pressure ulcer prevention and other aspects of fundamental nursing care were not part of a nurse’s responsibilities. The view that there are some nurses and students who feel that the delivery of fundamental nursing care is not their responsibility has been highlighted in other studies by Kalisch (2006) and Allan and Smith (2009).

The change in the value that the participants placed on pressure ulcer prevention appears to have been primarily influenced by their own experiences of looking after patients with high grade pressure ulcers. The impact of education on the value that the participants placed on pressure ulcer prevention appears to have varied tremendously at different stages in the
participants’ careers.

The education that the participants had received on maintaining skin integrity early on in their careers, especially their preregistration education appears to have been ineffective as the participants said that they had learned very little about preventing and managing pressure ulcers. This is epitomised by the fact that the participants state that the first time that they saw pressure ulcer they did not know what it was and their skin care practice was primarily determined by their senior colleagues. This was despite the fact that many of the participants had been taught about pressure ulcers in their training before they were allowed to look after patients.

Once the participants had more experience of looking after patients with pressure ulcers, the said that they had learned a lot from the post-registration education that they had received on pressure ulcers. This suggests that experience has a greater impact on the value that the nurses place on pressure ulcer prevention than education. It also indicates that experience may influence the motivation of nurses to learn from the education that they receive on pressure ulcers.

The relationship between education, experience and the value that a nurse places on pressure ulcer prevention is a novel finding of this study. Nonetheless, it appears to be consistent with what is known about the manner in which values are known to be formed and evolve. This is because studies have shown that values are influenced by education, socio-influences, but they are largely determined by a person’s own experiences (Hebel 1998; Baker 1999; Pakizeh 2005).

**The value placed on other aspects of nursing and this grounded theory**

The value that nurses place on other aspects of nursing care and how this affects the manner in which nurses prioritise and deliver care to their patients was also identified. The participants’ accounts revealed that the higher the value that the nurse placed on a specific aspect of nursing, the more likely it was that the nurse would take part in the delivery of care pertaining to that specific aspect of patient care. This was another novel finding of this study.

The grounded theory that emerges from this study is that nurses work according to the
value that they place on pressure ulcer prevention, even though the actual manner in which they deliver skin care to their patients is subject to clinical priorities and other factors. This study also shows that the value that a nurse places on pressure ulcer prevention evolves in line with their prior experiences of looking after patients with high grade pressure ulcer. The data in this study also shows that the value that a nurse places on pressure ulcer prevention can only increase as they gain more experience of looking after patients with high grade pressure ulcers. The evidence in this study also shows that once a nurse places a high value on pressure ulcer prevention, this value does not diminish.

Now that a brief synopsis of the main findings has been given, it is time to evaluate this study and the significance of the grounded theory that it generated.

5.2 Evaluating this study

The most appropriate evaluative framework

All research is subject to evaluation in order to ascertain if the results obtained are reliable and possess genuine significance. There are many different frameworks for evaluating qualitative research, but there is no consensus on a generic set of criteria that can be used to appraise all qualitative research (Elliott, Fischer et al. 1999; Sandelowski and Barroso 2002; Rolfe 2006). Most researchers opt to evaluate qualitative research using paradigm specific evaluative criteria, which entails the use of an evaluative framework that is the most intellectually compatible with the research method used in a given study (Cutcliffe and McKenna 1999; Spencer, Ritchie et al. 2003). The use of paradigm specific evaluative criteria to evaluate qualitative research is popular, but it makes it challenging to compare studies that use different qualitative research methods (Slevin and Sines 1999; Goulding 2002). This challenge will be addressed in this chapter as this study will be evaluated with paradigm specific criteria that facilitate effective comparisons with other qualitative studies.

Straussian grounded theory has a number of unique features that are distinct from those of other qualitative approaches, which mean that it requires its own evaluative criteria (Annells 1997a; Strauss and Corbin 1998b; Streubert and Carpenter 1999a). This is highlighted by the fact that Straussian grounded theory acknowledges the need to evaluate the quality of a theory by ascertaining the validity, reliability and credibility of the data that
underpin a theory; but it does not explicitly state what evaluative criteria should be used (Strauss and Corbin 1990; Annells 1997a). Instead, the robust evaluation of a Straussian grounded theory study focuses on the theory’s plausibility and value by analysing the adequacy of the research process that created the theory and the empirical grounding of the findings; because they determine how extensively it can be verified (Corbin and Strauss 1990; Annells 1997b; Streubert and Carpenter 1999b). Therefore, this study will now be evaluated against these criteria for a robust and rigorous Straussian grounded theory in order to ascertain its significance.

5.2.1 The rigour of the research process

There are seven main criteria that are used by most researchers to evaluate the rigour of the research process of a Straussian grounded theory (see table 5.1 below) (Corbin and Strauss 1990; Babchuk 1996; Annells 1997b; Streubert and Carpenter 1999b).

**Table 5.1 Criteria for rigour in the research process**

Adapted from Corbin and Strauss (1990), Babchuk (1996), Annells (1997b), Streubert and Carpenter (1999b).

| 1. Criteria for sample selection |
| 2. Emergent categories |
| 3. Main indicators of categories |
| 4. Progression of theoretical sampling |
| 5. Emergent hypotheses and their creation and verification |
| 6. Discrepancies with the emergent hypotheses, how they were accounted for and their subsequent impact on the hypotheses |
| 7. How and why the core category was selected |

The research process at the heart of this study has already been set out in chapter two of this study. Consequently, the rest of this section will appraise this study against the aforementioned criteria for rigour in the research process.
Criteria for sample selection

The population that was targeted by the researcher at the onset of this study and the rationale for the selection of this population were set out at the beginning of the section on data collection in the second chapter of this thesis. This was followed by the presentation of the initial plan for data collection in this study which was based on the principle of purposive sampling. This was in line with the tenets of Straussian grounded theory which often begins with purposive sampling and then shifts to theoretical sampling once data collection is underway (Cutcliffe 2000a; Morse 2007).

The initial plan for data collection from a purposive sample was also consistent with the principle that the initial data collection in a Straussian grounded theory study commences with a focus on the social processes that seem to be innately interesting (Backman and Kyngas 1999; Corbin and Strauss 2008). This study shifted to theoretical sampling once a tentative theory began to emerge, which is epitomised by the fact that data were gathered in two main stages from two different samples of nurses. It must also be noted that the logic and rationale underpinning the selection of participants in both stages of data collection in this study have also been clearly specified. Therefore, this study fulfils the requirements for robust sample selection because the reasons and manner in which the sample was selected have been clearly stated and they are consistent with the principles of Straussian grounded theory.

Emergent categories

The aims and objectives of each and every stage of data analysis were highlighted in chapter two in order to provide an insight into the researcher’s objectives as the data were analysed. The categories that emerged from the data in a three step coding process underpinned by constant comparison are presented in appendix 20 on page 277. The manner in which the initial codes and categories were integrated and refined as data analysis progressed was also highlighted in appendices 18 and 19 on pages 272 and 274 respectively. An example of the manner in which coding progressed from open categories to possible core categories is also set out in appendix 22 on page 279. Therefore, the manner in which the categories in this study were identified and integrated has been clearly stated.
Main indicators of categories

The main indicators of the categories that emerged from this study were highlighted in the discussion of the findings in chapter three and chapter four. On the other hand, the process by which these indicators were identified and the intellectual underpinnings of the process that led to their identification was specified in the data analysis section of chapter two. The evidence that is presented in the discussion of the findings highlights the best examples of the indicators of the categories that emerged from this study. Therefore, this study not only specifies the main indicators that emerged from the data but it also states the logic and rationale underpinning the process which led to their identification.

Progression of theoretical sampling

The shift from purposive to theoretical sampling in the requirement of the sample and the collection of data in this study was revealed in the section on data collection in chapter two. This section also highlighted the manner in which theoretical sampling drove the selection of the participants after the initial data had been gathered. The use of theoretical sampling in this study also resulted in the recruitment of a group of participants that was more diverse than initially anticipated.

Although the differences in the sample of participants recruited at different stages in this study are indicative of the use of theoretical sampling, theoretical sampling does not mean that the sample that is recruited after initial data collection had to be different. Theoretical sampling refers to the fact that the sample that is recruited after the initial data collection must be driven by the emergent hypotheses in Straussian grounded theory (Draucker, Martsolf et al. 2007; Corbin and Strauss 2008). This means that the original participants in this study could have been re-interviewed or a similar group of participants could have been recruited in the second stage of data collection if the emergent theory had demanded it. So, the information that was provided in chapter two shows how theoretical sampling progressed and contributed to the theory that emerged from this study.

Emergent hypotheses and their creation and verification

The tentative hypotheses that emerged from the analysis of data in this study have been clearly set out in the data analysis section of second chapter. This section also specified the
manner in which in these hypotheses were subsequently tested against the data in order to verify them. Perhaps, the best illustration of the clarity of the description and verification of the tentative hypotheses is provided in the section on selective coding in chapter two.

The section on selective coding clearly states that attempts to identify a core category after the first stage of data collection were unsuccessful, which means that some elements of the tentative hypotheses were not verified by the data at this junction. This resulted in further data being collected until a core category emerged around which a theory could be integrated. Hence, the information that is provided on data analysis in this study specified the manner in which the emergent hypotheses were created and verified through constant comparison with the data.

**Discrepancies with the emergent hypotheses**

The data analysis section also elaborates how discrepancies between the emergent theories and the data were identified and resolved as the emergent theories were created and verified. After the first stage of data collection, some aspects of the tentative theories that emerged could not be verified by the initial data and participants. This resulted in a second stage of data collection in order to clarify some of the discrepancies between the initial data and the tentative theories. So, the discrepancies between the tentative theories and the initial data were resolved by the simultaneous collection and analysis of more data until a robust theory was integrated.

The majority of discrepancies between the tentative theories and the initial data in this study related to issues around nurse training and nurse management in hospitals. Consequently, senior nurse managers and a nurse educator were recruited to this study in order to clarify these discrepancies. The analysis of the additional data provided by these participants and other sources resulted in the emergence of a core category, the integration of a theoretical framework and the induction of a conceptually dense grounded theory. Therefore, this study specified the discrepancies that emerged between the emergent theories; how they were resolved and how they contributed to the theory that emerged from this study.
How and why the core category was selected

The rationale underpinning the selection of the core category in this study was revealed in the data analysis section of chapter two and restated in the discussion of the findings of this study. This section also set out the process that resulted in the identification of the core category and the manner in which this process adhered to the tenets of Straussian grounded theory. The criteria that the researcher used to identify the core category in this study were also specified in chapter two.

The third and fourth chapters which discuss the findings of this study show how the core category in this study fulfills the criteria for core category in a Straussian grounded theory study. This is because the data that is presented in these chapters shows how the core category in this study met each of the requirements for the core category in a good Straussian grounded theory study in great detail.

This section has shown that the research process that underpinned this study fulfills all of the recognized criteria for rigour in the research process of a Straussian grounded theory study. The next section will evaluate the empirical grounding of the study against criteria for a robust grounded theory.

5.2.2 The empirical grounding of the study

The second set of criteria for evaluating the rigour of a Straussian grounded theory focus on the robustness of the empirical grounding of the study. There are seven recognized criteria for evaluating the empirical grounding of a well-constructed Straussian grounded theory, which are set out in table 5.2 overleaf (Corbin and Strauss 1990; Annells 1997a; MacDonald 2001a; Bakir and Bakir 2006). This study will now be evaluated against these criteria in the rest of this section.
Table 5.2 Criteria for the robustness of the empirical grounding

Adapted from Corbin and Strauss (1990), Annells (1997a), MacDonald (2001a) and Bakir and Bakir (2006).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Generation of concepts</td>
</tr>
<tr>
<td>2.</td>
<td>Systematic relationships between concepts</td>
</tr>
<tr>
<td>3.</td>
<td>Conceptual Density</td>
</tr>
<tr>
<td>4.</td>
<td>Variation</td>
</tr>
<tr>
<td>5.</td>
<td>Fit/significance</td>
</tr>
<tr>
<td>6.</td>
<td>Understanding</td>
</tr>
<tr>
<td>7.</td>
<td>Auditability/ generalisability/modifiability/reproducibility</td>
</tr>
</tbody>
</table>

**Generation of concepts**

A robust grounded theory provides a synopsis of the theoretical perspectives and rules for data collection and analysis alongside some data and emergent concepts in order to facilitate reproducibility and auditability (Strauss and Corbin 1998a; MacDonald 2001a; Chiovitti and Piran 2003). The decisions that were made during the collection and analysis of data in this study as well as the principles that underpinned this process were clearly stated in chapter two. This was coupled with the exposition of the codes and categories that emerged from the data. The data pertaining to the codes and categories that emerged from this study are discussed in great detail and length in the discussion of the findings in the third and fourth chapters of this thesis. Therefore, this study meets this criterion for empirical grounding because the generation of concepts from the data is set out in such clear detail that it facilitates auditability and reproducibility.

**Systematic relationships between concepts**

A well-constructed grounded theory shows how the relationships between concepts have been established and systematically conceptualised (Corbin and Strauss 1990; Strauss and Corbin 1998a; MacDonald 2001a). A rigorous grounded theory ensures that the links between concepts are grounded in the data, systematically developed and interwoven into
the fabric of the theory regardless of the format of their presentation (Strauss and Corbin 1998a; 1998b).

The detailed exposition of the data analysis in chapter two showed how the codes that emerged in this study were combined into categories using the classic six c coding paradigm that is at the heart of Straussian grounded theory. The description of the data analysis process also showed how the concepts in this study were verified against the data, which enabled the researcher to establish the nature of the relationships between them and combine them into categories. As has been already stated, the generation of the categories in this study was undertaken via a systematic process of data analysis which adhered to the canons of Straussian grounded theory. So, this study meets this requirement for rigour in the empirical grounding of a Straussian grounded theory study.

Conceptual Density

A rigorous Straussian grounded theory study adheres to the use of a coding paradigm because it ensures that the categories which are generated are conceptually dense and supported by the data (Strauss and Corbin 1990; Bakir and Bakir 2006). A robust Straussian grounded theory study also possess taut links between the features of the coding paradigm that it uses and density of its categories because this results in the generation of a theory that has robust explanatory power (Strauss and Corbin 1998a; Streubert and Carpenter 1999b).

The coding paradigm that was used in this study was the classic Straussian grounded theory six c coding paradigm. The use of the six c coding paradigm entails examining all of the codes and categories in terms of their causes, conditions, contexts, consequences, covariances and contingents (Schreiber 2001b; Goulding 2002). Consequently, each and every code and category that emerged in this study was examined in terms of each aspect of the six c coding paradigm. The conceptual density of the categories that emerged in this study had been highlighted in the discussion of the findings of this study. Thus, it is evident that the use of the six c coding paradigm in the analysis of data in this study resulted in the generation of a conceptually dense grounded theory.
Variation

The creation of a robust grounded theory and its associated basic social psychological process relies on the careful application of the coding procedures because this facilitates the generation of a theory that accounts for variations in the data and specifies the condition within which it applies (Strauss and Corbin 1998a; Benton 2000; MacDonald and Schreiber 2001b).

The simultaneous process of data collection and analysis in this study adhered to the tenets of Straussian grounded theory as was set out in the second chapter of this thesis. This was important because following the principles of Straussian grounded theory has been shown to generate a robust theory with variation in other studies (Streubert and Carpenter 1999b; Bakir and Bakir 2006). The rigour and variation of this grounded theory is highlighted in its associated model and the findings. The grounded theory that emerged from this study is that nurses work according to the value that they place on pressure ulcer prevention. The data in this study indicates that nurses’ attempts to deliver skin care that is consistent with the value that they place on pressure ulcer prevention are subject to clinical priorities and other factors.

This grounded theory also accounts for the variations in the participants skin care practices at various stages in their careers. In addition, this theory also provides a viable explanation for the differences in the calibre of skin care which the participants claim to exist between nurses who place a different value on pressure ulcer prevention. It must be acknowledged that the extent to which this grounded theory applies to nurses working in other settings must be established in future research. Despite this, it is clear that the use of a recognised Straussian grounded theory coding paradigm in this study resulted in the generation of a robust grounded theory that explains all of the variations in the data and specifies the conditions in which it applies. So, the evidence suggests that the use of Straussian grounded theory enabled this study to fulfil its main objective of generating a robust theory on the value that nurses place on pressure ulcer prevention.
Fit/significance

A well-constructed Straussian grounded theory is an accurate representation of the everyday reality of the substantive topic of interest based on the careful induction of a range of data, and it also fits with what is already known about that substantive topic (Strauss and Corbin 1998a; MacDonald and Schreiber 2001b). A good grounded theory not only states the relationships between its categories and pertinent literature, but it also specifies the scope of the research and the level of theory that is generated (Strauss and Corbin 1998b; Streubert and Carpenter 1999a; Chiovitti and Piran 2003).

The findings from this study fit in with what is already known about pressure ulcer prevention. Studies that have examined nurses pressure ulcer related attitudes and behaviour report that nurses place a low value on pressure ulcer prevention (Maylor 1999; Athlin, Idvall et al. 2010). The findings of an Irish survey suggested that nurses place a high value on pressure prevention (Moore and Price 2004). It must be noted that these studies briefly touched on the value that nurses placed on pressure ulcer prevention, as they were examining other aspects of nurses pressure ulcer related attitudes and behaviours. All the participants in this study were found to place a high value on pressure ulcer prevention but they stated that some of their nursing colleagues placed a low value on pressure ulcer prevention. So, the findings of this study are consistent with what is known about the value that nurses place on pressure ulcer prevention from other studies.

The participants in this study also stated that nurses who place a high value on pressure ulcer prevention are more proactive and inclined to undertake preventative interventions than nurses who place a low value on pressure ulcer prevention. It must however, be noted that the participants pointed out that their attempts to deliver care to their patients in line with the value that they placed on pressure ulcer prevention were subject to clinical priorities and other factors. As a result, the majority of care to prevent pressure ulcers was often delegated to nursing auxiliaries and students. The participants maintained that they only delegated the delivery of interventions to maintain skin integrity to students and nursing auxiliaries who were competent to deliver the requisite care. In addition, the participants said that they took part in the care of the patients who were identified as being at high risk of pressure ulcer formation. Therefore, the manner in which the participants
delivered skin care was in line with their values because they only delegated the skin care of patients at low risk of developing pressure ulcers to competent nursing auxiliaries, while they attended to other more pressing issues.

The findings pertaining to the levels of nurse participation in care to prevent pressure ulcers also provide an explanation for the discrepancy between the value that nurses claimed to place on pressure ulcer prevention in Moore and Price (2004) study and the calibre of skin care that their patients received. These findings also account for the finding that the delivery of care to prevent pressure ulcers is largely delivered by students and nursing auxiliaries in Young, Williams et al.’s (2004) study. So, this study makes an important contribution to what is known about pressure ulcer prevention in clinical practice because it shows the impact that the value that a nurse places on pressure ulcer prevention has on the skin care that patients receive. It does this by validating some of the findings from previous studies on pressure ulcer prevention and nurses’ attitude and behaviour towards this aspect of patient care.

This study also sheds further light on the relationship between the value that a nurse places on pressure ulcer prevention and factors in clinical practice which affect their ability to deliver care that is congruent with their values. This study also provides a novel insight into the clinical priorities and other factors that push pressure ulcer prevention down the list of a nurse’s priorities.

Therefore, the relationships between the codes and categories in this study and pertinent literature and research have been highlighted. The scope, level and significance of the grounded theory that has emerged from this study have also been clearly stated. Therefore, this study meets the criteria pertaining to the fit and significance of a robust Straussian grounded theory.

**Understanding**

A good grounded theory can be understood by the participants who are studied and are working in that area and they can make sense of that theory because it is a representation of their reality (Strauss and Corbin 1998a; MacDonald and Schreiber 2001b). Ensuring that
the participants understand a grounded theory about some aspect of their world is not the same thing as participant validation which is incompatible with Straussian grounded theory.

Participant validation is not required in a Straussian grounded theory study because the process of constant comparison that is inherent in this research method ensures the representativeness of the concepts and categories which are generated (Corbin and Strauss 1990; Cutcliffe and McKenna 1999). With this in mind, the researcher had hoped to share the findings of this study with the participants in order to show them the impact that their contribution had made on this research. This would also have provided an opportunity to ascertain if the participants could make sense of this grounded theory. Unfortunately, the ethical and research governance approval to contact the participants ran out before a robust grounded theory was integrated. Therefore, the researcher was not able to share the grounded theory that emerged from this study with the participants.

As a result, other measures were taken to ensure that this grounded theory could be understood by similar groups of nurses and other healthcare professionals. Firstly, the grounded theory from this study was presented to similar groups of nurses at national and international tissue viability conferences. The findings of this study have also been published in a peer reviewed journal (see appendix 24 on page 282) (Samuriwo 2010a; Samuriwo 2010b). Nurses and other healthcare professionals who encountered the findings of this study at conferences or in journals informed the researcher that they understood the Straussian grounded theory that was generated in this study. The nurses also stated that this grounded theory was an accurate representation of their reality even though they came from different countries, with different healthcare systems. So, this study meets the standards for understanding in a well-constructed grounded theory.

Auditability/ generalisability/modifiability/reproducibility

A robust Straussian grounded theory is comprehensive and has broad conceptual interpretations, which provide it with sufficient abstraction to be applicable to a range of different contexts related to that phenomenon (Strauss and Corbin 1998b; Chiovitti and Piran 2003). On the other hand, a Straussian grounded theory can only be generalised to situations that exactly match the conditions in which the study was undertaken because of
the low probability of finding other situations that are identical to those in which the study was undertaken (Strauss and Corbin 1998a; Schreiber 2001b).

The lack of reproducibility or generalisability in the conventional sense is of limited relevance to the rigour of Straussian grounded theory because it is underpinned by a relativist ontic thrust which views the world as being constructed and so it does not depend on the discovery of absolutes on which generalisability is predicated (Babchuk 1996; Annells 1997b; Strauss and Corbin 1998b). This means that reproducing a Straussian grounded theory is impossible, but similar results can be obtained if the same data are gathered and analysed with the same theoretical perspectives, rules and under the same conditions (Strauss and Corbin 1990; Annells 1997a). The exact reproduction of a Straussian grounded theory study is impossible because it is difficult to find conditions that are exactly the same as those of the initial study, even if there are a lot of similarities (Strauss and Corbin 1998a; 1998b).

The coding paradigm, codes and categories that emerged from the data in this study have been highlighted in the second chapter and the raw data presented in the discussion of the findings of this study. Therefore, it is possible to audit the manner in which this grounded theory was generated from the raw data.

A Straussian grounded theory has limited generalisability, but this grounded theory appears to be comprehensive and abstract enough to be applied to other aspects of nursing. The evidence in this study indicates that theory that there is a relationship between the value that nurses place on pressure ulcer prevention and the skin care that they deliver may be applicable to nurses working in other settings. The data also suggests that this theory about the relationship between the value that a nurse places on an aspect of patient care and the manner in which they deliver care to their patients may also apply to other aspects of nursing like preventing a heart attack and preventing MRSA infection. The comprehensiveness of this grounded theory is highlighted by the fact that it identifies the fact that it identifies a number of factors that affect the manner in which nurses prioritise and deliver care to maintain their patients’ skin integrity.

To put it simply, the extent to which this grounded theory about the value that nurses place on pressure ulcer prevention can only be applied to other settings to a limited extent.
However, the evidence in this study indicates that the relationship between the value that a nurse places on a specific aspect of nursing influences the manner in which they prioritise and deliver the care pertaining to that aspect of nursing. This suggests that some elements of this grounded theory may be applicable to other aspects of nursing like preventing MRSA infection. Therefore, the extent to which this theory can be applied to other nurses and other aspects of nursing must be established in future research. Nonetheless, it is clear that this theory meets the criteria for generalisability/auditability in a robust Straussian grounded theory study.

The evidence that has been presented in this section shows that this grounded theory meets all of the recognised standards for rigour in the research process and robustness in its empirical grounding. Nonetheless, the next section of this chapter will consider the strengths and limitations of this study.

5.3 Strengths and limitations of this study

The main limitations of this study all relate to the fact that it used a self-selecting sample of participants who all said that they valued pressure ulcer prevention highly. This is not surprising given the voluntary nature of participation in this study, which meant that people with an interest in pressure ulcer prevention were more likely to take part. It is worth noting however, that more than 500 registered nurses and 61 students were given the opportunity to take part in this study.

The findings of this study point to the existence of nurses with a low and high value of pressure ulcer prevention. Nonetheless, some may choose to question the veracity of its findings pertaining to the practice of nurses who place a low value on pressure ulcer prevention because all the participants in study were found to place a high value on pressure ulcer prevention. This is an inconsequential point because one of the main original findings of this study is the transition from a low to a high value of pressure ulcer prevention that the participants said that they underwent. Therefore, the view that there is insufficient evidence about the practice of nurses who place a low value on pressure ulcer prevention is misguided because the participants state the characteristics that they possessed when they placed a low value on pressure ulcer prevention. The fact that they recognise some of the
characteristics that they had when they held a low value of pressure ulcer prevention in some of their colleagues is of secondary significance.

The fact that the participants in this study were found to place a high value on pressure ulcer prevention mean that the findings of this study must be interpreted with caution when attempting to apply them to other settings. This is because the characteristics of this nurses who took part in this study may not the same as those of nurses who work in other healthcare settings. It is also acknowledged that this grounded theory can only be generalised to settings that are identical to those in which this study was undertaken as it is a Straussian grounded theory. Even though the grounded theory that has been presented is the best possible explanation for the phenomena in the data in this study, it is possible that there is an alternative and equally viable theory that is yet to be identified.

The main strengths of this study lie in its fastidious application of the tenets of Straussian grounded theory and other measures which resulted in the generation of a robust theory. These measures will be highlighted in the rest of this section.

**Credibility of the participants accounts**

The theory was generated in this study is largely dependent on the participants’ accounts, which some may choose to question.

The participants’ are reliable informants in the researchers view, because they have a genuine interest in pressure ulcer prevention. This was underlined by the fact that the participants volunteered to take part in this study at a time when they faced many challenges in clinical practice with no personal benefit. In addition, many of the participants were so enthusiastic about taking part in this study that they came into work early or stayed behind after their shift to be interviewed by the researcher.

There are other reasons why the participants in this study are credible informants. All but one of the junior nurses that took part in this study were tissue viability link nurses for their wards or had post registration qualifications in tissue viability. The rest of the nurse participants were in senior positions in the hospital or university, which means that they were well placed to judge and comment on the practice of other nurses as the appraisal of care that is delivered by nurses and students is a key part of their roles. This means that
most of the participants that took part in this study held positions or qualifications, which meant that they were well placed and suitably qualified to comment on the delivery of care to maintain skin integrity in clinical practice.

The reliability of the participants as judges of clinical practice is also evident in the fact that they expressed similar views on many issues despite having different professional backgrounds and working in different professional settings. This is because if the participants were motivated by self-interest or were dishonest, then it is more likely that there would have been more differences in their accounts given the diversity of their experiences and clinical settings. The fact that the vast majority of people that took part in this study had similar views even though they worked in different settings and held different positions also enhances the rigour and generalisability of the theory that emerged. This is because it means that the grounded theory which emerged was founded on the accounts of nurses with a diverse range of experiences, roles and responsibilities in clinical practice.

A number of measures were implemented in this study to ensure that the participants were reliable informants. Firstly, the researcher confirmed that all the participants had actually seen a pressure ulcer before undertaking an interview by asking them to point out which grades of pressure ulcers they had seen on the EPUAP pressure ulcer grading scale. During the interviews, the participants were again asked about the grades of pressure ulcers that they had seen in order to ensure that they were not confusing pressure ulcers with other types of wounds. Other aspects of pressure ulcers and their prevention were explored with the participants during interviews in order to ascertain if their knowledge and views on these topics were consistent with the best available evidence.

All of the participants in this study said that they had come across the grades of pressure ulcers set out in the EPUAP pressure ulcer grading scale. Their knowledge of how to prevent and manage pressure ulcers was also consistent the best available evidence and guidance. The participants’ accounts of their clinical areas such as the types of patients and the equipment available were also objectively verified by the researcher during ward visits. The researcher was also able to validate the participants’ accounts of clinical practice by comparing them against data provided by the Trust such as the number of patients with pressure ulcers on a given ward. The credence of the participants’ assertions is augmented
by the fact that their knowledge about pressure ulcers is consistent with the best available
evidence and guidance as has been highlighted in the last two chapters.

The main reason why the participants’ accounts are reliable is the fact that an unobtrusive
measure was used to elicit the value that they placed on pressure ulcer prevention. This
means that the participants were unaware that the researcher was eliciting the value that
they placed on pressure ulcer prevention when they took part in the study. The participants
were only informed that the researcher was interested in talking to them about their
experiences of looking after patients with pressure ulcers. The use of an unobtrusive
measure means that there was no obvious incentive for the participants to be dishonest
about their experiences in clinical practice or to portray themselves favourably at the
expense of their colleagues.

In any case, the view that one adopts on the credibility of the participants’ accounts is of
limited relevance to this grounded theory study. This is because the objective of this study
was to generate a theory on the value that nurses place on pressure ulcer prevention. The
data that had been provided in this thesis shows that a robust grounded theory has been
generated from that obtained largely through the participants’ accounts. So, regardless of
whether or not the participants were telling the truth; the evidence in this study shows that
a rigorous grounded theory that is firmly grounded in the data was generated.

It is possible that the veracity of the participants’ accounts may be objectively verified in
future research using other research methods like direct observation. This would also help
to increase the generalisability of the grounded theory that was generated in this study. If
given the opportunity, this is one area that the researcher would like to explore in following
this research.

This study has added strength in that it implemented measures to overcome some of the
most cited criticisms of Straussian grounded theory, which will now be discussed in detail.

**Overcoming the criticisms of Straussian grounded theory**

The most popular criticisms of grounded theory pertain to its conceptualisation, use of
literature, and positivistic language.
Some argue that Straussian grounded theory increases the complexity of theory generation and results in over conceptualisation because of its insistence on naming each separate incident instead of looking for similar incidents and their patterns that can subsequently be named (Pandit 1996; Allan 2003). It has also been reported that the line by line coding inherent in Straussian grounded theory can be very onerous and overwhelming because of the large volume and complexity of the concepts and categories that it generates (Andrews 2003; Denscombe 2003). The researchers who report this finding state that they prefer Glaserian grounded theory, which raises the prospect that their preference may have biased the manner in which they analysed their data using Straussian grounded theory. The criticisms pertaining to over conceptualisation were irrelevant in this study as the coding of data proceeded without any of the problems that have been reported in other studies.

The review of literature before data collection within Straussian grounded theory has been criticised by some grounded theorists who feel that a literature review prior to the study hinders the generation of a data based theory (Glaser 1998; Cutcliffe 2000a; Llewellyn 2005). Many of the researchers who express this view prefer Glaserian grounded theory, which has a different approach to the use of literature. Thus, these critics of the use of a preliminary literature review prior to a Straussian grounded theory may be biased in their criticisms.

A comprehensive literature review was carried out prior to this study, which identified only three studies that had a small amount of relevance to this study. The fact that there was no directly pertinent literature to this study negates the argument that a preliminary literature review hinders the generation of a data based theory. In fact, the preliminary literature review showed why this study was necessary as it confirmed that no such research had previously been undertaken. In any case, a well thought out literature review enhances the researcher’s theoretical sensitivity and provides additional richness to the theory generated in a Straussian grounded theory in various ways (Strauss and Corbin 1990; 1998b).

Straussian grounded theory has also been criticised for its lingering uses of neo-positivistic language theory that can be misconstrued by post-modern grounded theorists like Clarke (2005) and Charmaz (2006). The quintessence of neo-positivistic language in Straussian grounded theory is the reference to attempting to encapsulate as much of the “real” world
as possible, although it is subsequently qualified by the concession that a complete grasp of the real world is not possible (Strauss and Corbin 1998a; Urquhart 2001; Denscombe 2003). Nonetheless, it is worth noting that a complete grasp of the real world is not the same thing as capturing as much of the real world as possible.

The comprehensive discussion of procedure and the specified use of the paradigm model as the coding framework coupled with an emphasis on dimensionalisation in Straussian grounded theory are also often misunderstood as positivist or neo-positivist characteristics (Corbin and Strauss 1990; Annells 1997a). Dimensionalisation refers to the process of conceptualisation in Straussian grounded theory when the properties of categories are developed in different dimensions (Corbin and Strauss 1990; Boychuck-Duchscher and Morgan 2004). The process of dimensionalisation is undertaken through the review of all of the data by the researcher who thinks temporally and appraises all the data and categories in terms of processes, interactions and structures (Backman and Kyngas 1999; Boychuck-Duchscher and Morgan 2004; Corbin and Strauss 2008). Consequently, this aspect of Straussian grounded theory is often viewed by some grounded theorists; especially those who prefer Glaserian grounded theory as “shoehorning” the data to fit preconceptions (Annells 1997a).

The process of dimensionalisation in this study revealed that there were three main dimensions to the data in this study. The dimensions which emerged are the value that nurses place on pressure ulcer prevention and how this relates to the manner in which they deliver skin care, the manner in which this value was formed and the value that nurses place on other aspects of nursing and how this affects the prioritisation of patient care. The majority of findings pertaining to each of these three dimensions in this study have not been previously reported, so the accusation that dimensionalisation results in the shoehorning of data to fit preconceptions proved to be unfounded. The use of dimensionalisation contributed to the emergence of three possible core categories in the latter stages of data analysis, which contradicts the idea of manipulating data to fit pre-existing ideas.

The insistence on theoretical verification by the research process in Straussian grounded theory is often viewed as another positivist or neo-positivist characteristic (Annells 1997a; Walker and Myrick 2006). These accusations of a positivist or neo-positivist slant are proved
wrong when a rigorous study of the tenets and the inherent philosophical underpinnings of Straussian grounded theory is undertaken (Annells 1997a; Strauss and Corbin 1998a). A comprehensive review of Straussian grounded theory by the researcher revealed that it uses inductive, abductive and deductive techniques; which are commonly associated with a positivistic research approach.

In Straussian grounded theory these techniques are not used to test a theory as in a positivist research method, but they are techniques that are used to verify that the theory that is generated is grounded in the data. Indeed, these techniques were used in this study to ensure that the grounded theory that was generated was firmly rooted in the data; verified by the data and was as robust as possible.

The difference between what inductive, abductive and deductive techniques are normally associated with and what they are used for in Straussian grounded theory may appear to be a minor semantic point, but it is a point that has profound significance. This is because what is of paramount importance is not the technique that is used to analyse data, but why that technique is being used and what it is being used to achieve. This subtle point is perhaps best illustrated using an example from everyday life. Knives are normally used to cut food, but they have a myriad of other purposes that they can be used for like an emergency screwdriver or for carving. This does not mean that carving or fastening screws are in any way associated with food preparation, therefore the argument that the use of these techniques in Straussian grounded theory indicates a positivist or a neo-positivist slant is intellectually untenable. Instead, these criticisms about a positivist or neo-positivist slant arising for the use of these data analysis techniques point to a poor understanding of the tenets of Straussian grounded theory.

This section has shown that the main limitations of this study pertain to the sample that was recruited in this study. In contrast, the strengths of this study lie in its application of the tenets of Straussian grounded theory and the measures that were taken to ensure the credibility of the participants accounts. An additional strength of this study lies in the vigilance that was maintained with regards to the common criticisms of Straussian grounded theory throughout its tenure, even if these criticisms ultimately proved to be unfounded.
Having established the strengths and limitations of this study, it is now time to consider its contribution to knowledge and its significance.

5.4 Contribution of this study

This study has made a modest but significant contribution to what is known about the role that nurses play in pressure ulcer prevention in a number of ways. The significance of this study is underscored by the fact that many of its findings are validated by the results of other studies. In addition, many of the findings of this study provide a viable explanation for the results of other studies. The contribution of this study and its significance will be set out in the remainder of this section.

Value placed on pressure ulcer prevention

This study sought to ascertain the value that nurses place on pressure ulcer prevention. This is a topic that has only briefly touched upon in previous research which has examined other aspects of nurses’ attitude and behaviour towards pressure ulcer prevention. Research in other fields of intellectual inquiry like psychology has shown that a person’s values influence their attitude and behaviour. Therefore, eliciting the value that is placed on pressure ulcer prevention by nurses raised the prospect of gaining an insight into nurses’ pressure ulcer related attitudes and behaviour. This is important because a number of studies have reported that nurses’ attitude, behaviour and delivery of care to maintain their patients’ skin integrity is inconsistent with best practice.

This study elicited the value that nurses place on pressure ulcer prevention and established how this value was reflected in the prioritisation and delivery of skin care in clinical practice. The findings of this study indicate that there are some nurses who place a high value on pressure ulcer prevention and others who place a low value on pressure ulcer prevention. This contrasts with previous studies by Maylor (1999), Moore and Price (2004) and Athlin, Idvall et al. (2010) which have reported or suggested that all their participants either placed a low or a high value on pressure ulcer prevention.

It must however be noted that all of the participants in this study were found to place a high value on pressure ulcer prevention and there is no direct evidence of nurses who place a low value on pressure ulcer prevention. This initially appears to be a limitation of this study,
but it accounts for the difference in the value that nurses have been said to place on pressure ulcer prevention in the other studies that have been cited.

So, this study makes a small but original contribution to knowledge by examining an aspect of pressure ulcer prevention that had not been previously subjected to detailed scientific scrutiny and by producing findings that shed further light on the findings of other studies. Another innovation in this study was the use of an unobtrusive measure to elicit the value that the participants placed on pressure ulcer prevention, which is something that has not been done before. This innovation was necessitated by the fact that this study used a qualitative research approach and the term value is prone to ambiguity.

The other main findings of this study have also contributed in a small way to advancing what is known about nurses and pressure ulcer prevention. Each of these findings will now be set out alongside a concise statement about how they have advanced knowledge.

**Value and care delivery**

The evidence in this study shows that clinical priorities and other factors have an impact on the manner in which nurses prioritise and deliver care to maintain the skin integrity of their patients. The impact that some of these factors can have on the delivery of patient care have been highlighted in a few studies, but the impact of clinical priorities on the delivery of patient care has not been previously reported. Therefore, this study shows the complex nature of the relationship between the value that is placed on pressure ulcer prevention by a nurse and the skin care that they deliver to their patients by showing how it is affected by clinical priorities and other factors.

These findings about the complex nature of the relationship between value placed on pressure ulcer prevention by nurses, clinical priorities, other factors and the delivery of care to maintain skin integrity also accounts for the results of other studies. One such study is an Irish survey which reported that many nurses said that they placed a high value on pressure ulcer prevention; but this was not reflected in their patients’ pressure ulcer related documentation (Moore and Price 2004). The findings of this study offer different explanations for the discrepancy between nurses’ pressure ulcer related attitudes and
beliefs and the calibre of skin care that their patients receive which has been highlighted in other studies.

One explanation is that clinical priorities and other factors impede nurses attempts to deliver care to prevent pressure ulcers that is consistent with their values. An alternative explanation is that the nurses in other studies have expressed a positive attitude towards pressure ulcer prevention, but this does not mean that they placed a high value on pressure ulcer prevention. There are two reasons why this may be the case. Firstly, the participants in other studies have been openly asked about their attitudes and behaviour with regards to pressure ulcer prevention. This means that these participants could have given what they deemed to be socially desirable responses unlike in this study, where the participants were only asked to talk about their experiences of looking after patients with pressure ulcers. Secondly, the evidence in this study shows that even when the delivery of care by nurses is affected by clinical priorities and other factors, nurses who place a high value on pressure ulcer prevention ensure that they play an active part in care to maintain the skin integrity of patients who are at high risk of developing pressure ulcers.

This study also contributes to knowledge by highlight the role that nurses play in the delivery of care to maintain the skin integrity of their patients. The evidence shows that despite the high value that the participants claim to place on pressure ulcer prevention; it is a task that is often delegated to nursing auxiliaries and students. This means that the majority of care to maintain skin integrity in clinical practice is delivered by students and nursing auxiliaries, without the direct participation of a nurse. This finding is also consistent with Young, Williams et al. (2004) observational study, which found that the majority of skin care in clinical practice was given by nursing auxiliaries and students.

The results of this study provide a viable explanation for why nurses may say that they place a high value on pressure ulcer prevention, but do not take part in the majority of skin care for their patients. That is the participants’ accounts indicate that they place a high value on pressure ulcer prevention, but they are often compelled to prioritise other aspects of nursing like bed management above maintaining the skin integrity of their patients. This means that the explanation for this apparent disconnect between value and practice
appears to lie in clinical priorities and other factors as well as busy nurses opting to delegate pressure ulcer prevention to attend to more urgent priorities.

One possible conclusion that can be drawn from this study, then, is that there are some nurses who perceive pressure ulcer prevention to be important. However, it is also possible that these nurses also view pressure ulcer prevention to be less important or urgent than other aspects of nursing; and it is therefore an aspect of nursing that is easier to delegate. Both of these conclusions are consistent the results of Maylor (1999), Moore and Price (2004) and Athlin, Idvall et al.’s (2010) studies as the majority of nurses in these studies stated that pressure ulcer prevention was a lower priority than other aspects of nursing. In fact, most of the nurses in Athlin, Idvall et al. ‘s (2010) study said that the maintenance of skin integrity was largely a concern for the nursing auxiliaries; even though nurses should retain overall responsibility.

**Value formation and evolution**

The evidence in this study revealed that all the participants undergone a transition from placing a low to a high value on pressure ulcer prevention, which was an unexpected finding of this study. Their descriptions of this transition were characterised by changes in their understanding of the importance of preventing pressure ulcers and changes in the actual manner that they delivered care to their patients. The participants also identified key landmarks in this transition and some of the factors which they felt had acted as a catalyst in the formation and evolution of the value that they placed on pressure ulcer prevention. These findings have not been reported in any other studies or even put forward as a theory. Therefore, this study makes a unique contribution to knowledge by shedding light on the manner in which the value that nurses place on pressure ulcer prevention is formed and evolves.

The discovery of the transition from a low to a high value of pressure ulcer prevention was important because it elevated the findings of this study from propositional knowledge to the higher level of procedural knowledge (Bloom, Krathwohl et al. 1964; Airasan, Cruikshank et al. 2001). This is because the main objective of this study was to ascertain the value that nurses place on pressure ulcer prevention, which is propositional knowledge. The participants’ accounts revealed the process by which the value that nurses place on
pressure ulcer prevention is formed and evolves, which is procedural knowledge. Consequently, this study makes an original contribution to what is known about nurses and pressure ulcer prevention at the higher level of procedural knowledge, by showing how the value that nurses place on pressure ulcer prevention is formed and evolves.

The discovery of the manner in which the value that is placed on pressure ulcer prevention by nurses is formed and evolves may appear to be a somewhat fortuitous outcome of this study. However, novel insights in innovative qualitative research are not obtained by random chance; but arise as a consequence of the researcher’s ability to comprehend and garner novel insights into a topic that may not be apparent to others (Fine and Deegan 1996). This raises the prospect that these findings of the study are not a result of serendipity, but are the consequence of the rigorous application of a systematic research method and intellectual preparedness and openness of the researcher to the phenomenon under investigation. This is the view that is held by the researcher.

**The value placed on other aspects of nursing**

The participants’ accounts about the relative value that they place on other aspects of nursing reinforce the grounded theory that emerged in this study. This is because they show that the value that is placed on a specific aspect of nursing influences the manner in which that aspect of patient care is prioritised and delivered. These findings about the relative value placed on different aspects of nursing are an original contribution to knowledge as they have not been previously reported.

This section has shown how this study has advanced knowledge in a small but significant way by increasing what is known about the value that nurses place on pressure ulcer prevention and the manner in which they deliver skin care to their patients. The original contribution of this study was highlighted by an overview of its novel findings such as the manner in which the value placed on pressure ulcer prevention is formed and evolves. The findings of this study have also been shown to be significant because they are consistent with and account for the findings of other studies that have been undertaken in different settings.
Perhaps, the greatest original contribution of this study is the fact that it highlights the insights into the delivery of care to maintain skin integrity in clinical practice that can be gained from research which examines nurses’ perceptions and views about pressure ulcer prevention. This raises the prospect that further research which results in a better understanding of nurses’ values, attitudes and behaviour with regards to pressure ulcer prevention may in time result in a reduction in the number of people who develop pressure ulcers. With this in mind, it is now time to conclude this thesis by reflecting on the implications that this study has for future research and clinical practice.

5.5 Recommendations for future research and clinical practice

The findings of this study have highlighted a number of issues, some of which merit further investigation and others which have implications for clinical practice. Therefore, the recommendations for future research and clinical practice arising from this study will now be set out.

**Future research**

The findings of this study show that there are many elements of nurses’ values, attitudes and behaviours with regards to the delivery of care to maintain skin integrity that must be examined in future research. Each of these elements will now be highlighted in turn.

The data in this study indicates that there is a relationship between the value that a nurse places on pressure ulcer prevention and the manner in which they deliver skin care to their patients. There are some elements of this relationship which must be subjected to further scientific scrutiny. It is important to elicit the value that nurses in other settings place on pressure ulcer prevention in light of the impact that this value appears on the delivery of skin care to patients. This would also help to establish the extent to which the findings of this study can be applied to other settings, especially with regards to the practice of nurses who place a low value on pressure ulcer prevention.

Future research must also examine the impact that clinical priorities and other factors have on the delivery of care to maintain skin integrity by nurses. This type of research is urgently needed in view of the fact that some of these clinical priorities and factors seem to have more of an impact on nurses’ attempts to prevent pressure ulcers than others. One of the
The main objectives of this research must be to establish if nurse managers and those involved in the commissioning of healthcare are aware of the impact that clinical priorities have on the manner in which patient care is delivered. It must also be established why some factors appear to have more of an impact of the delivery of care to prevent pressure ulcers by nurses than others.

The role that different healthcare professionals play in pressure ulcer prevention in everyday clinical practice must be investigated in future studies. Research into this issue is important because the findings of this study show that there is a tremendous opportunity for greater collaboration between different members of the MDT in order to improve patients’ pressure ulcer related outcomes. This has added importance given the limited role that nurses appear to play in delivery of hands-on care to prevent pressure ulcers for the majority of their patients.

The formation and evolution of the value that nurses place on pressure ulcer prevention is another element of this study that merits further research. This research would help to establish the extent to which the transition from a low to a high value described by the participants in this study applies to nurses working in other settings. The impact that education, experience and other socio-cultural factors have on the value placed on the maintenance of skin integrity must also be subjected to further scientific scrutiny. This is because this research could help to establish the core elements that could be incorporated into a programme of education for nurses to ensure that they place an appropriate value on pressure ulcer prevention and deliver a high standard of skin care to their patients.

The value that nurses place on other aspects of nursing must be subjected to further research. Research of this nature may provide further detail on the relationship between nurses’ values and the manner in which they deliver care with regards to other aspects of nursing. This is important in view of the relationship between value placed on pressure ulcer prevention and the delivery of skin care that is evident in this study. Research on the relative value that nurses place on different aspects of patient care must also examine the manner in which these values are formed and evolve, in view of the findings of this study about the formation and evolution of the value that is placed on pressure ulcer prevention by nurses.
The grounded theory that emerged from this study is that nurses work according to the value that they place on pressure ulcer prevention and this theory must be tested in future research in other settings. This is not to validate or verify this grounded theory as it is underpinned by the data in this study, but it is to clarify the extent to which it can be applied to nurses working in other settings. This is important because this theory is only generalisable to settings which are exactly identical to those in which this study was undertaken as it is a Straussian grounded theory study.

Clinical practice

There are a number of recommendations for clinical practice that arise from this study. These recommendations must be noted by nurse educators, nurse managers, healthcare commissioners and anyone else with an interest in pressure ulcer prevention or nursing practice.

A greater awareness of the relationship between the value that nurses place on pressure ulcer prevention and how this affects the delivery skin in clinical practice is needed. The manner in which this relationship is affected by clinical priorities and other factors must also be noted in view of the impact that it has on patient care. Action must be taken to ensure that clinical priorities and other factors do not have a negative impact on the delivery of care to prevent pressure ulcers by nurses. One way that this could be done is ensure that there is a sufficient provision of nurses and pressure relieving equipment to deliver the highest standard of care to maintain the skin integrity.

Key members of the MDT like doctors must play a more active role in the delivery of care to maintain skin integrity if patients are to receive the highest standard of care. Measures must also be implemented to ensure that tissue viability nurses are able to provide nurses in clinical practice with the education and support that they need to protect the skin of their patients. Nursing auxiliaries must be provided with education and training about pressure ulcer prevention before they are allowed to look after patients as they deliver the majority of care to maintain skin integrity in clinical practice. The policies and guidelines for clinical practice can also be amended in order to state more explicitly the roles and responsibilities of different healthcare professionals with regards to pressure ulcer prevention to ensure that patients receive the best possible care.
Pre-registration nurse education on maintaining skin integrity needs to be more engaging and must better reflect the realities of everyday practice if students are to place an appropriate value on pressure ulcer prevention by the time that they qualify as nurses. An on-going programme of education on pressure ulcers is needed once nurses are qualified given the positive impact that this type of education appears to have on the value that nurses place on pressure ulcer prevention and the delivery of skin care to their patients.

Perhaps, the real life experiences of nurses who have looked after patients with high grade pressure ulcers can be better integrated into the education and training that students and nurses receive. Such an approach offers many opportunities for better patient care in view of the relative impact that education and experience seem to have on the value that nurses place on pressure ulcer prevention and the care that patients receive.
References


Washington DC, European Pressure Ulcer Advisory Panel.

Washington DC, European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel.


Higginson, R. J. (2007). *Cardiac rehabilitation attendance and women: a straussian grounded theory*, University of Glamorgan.


RCN (2001). Pressure ulcer risk assessment and prevention recommendations London, Royal College of Nursing


### Appendix 1: Databases searched in literature review

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt Health Watch</td>
<td></td>
</tr>
<tr>
<td>ASSIA: Applied Social Science Index and Abstracts</td>
<td></td>
</tr>
<tr>
<td>British Humanities Index</td>
<td></td>
</tr>
<tr>
<td>BioMed Central</td>
<td></td>
</tr>
<tr>
<td>British Education Index (BREI)</td>
<td></td>
</tr>
<tr>
<td>CINAHL Plus with Full-text</td>
<td></td>
</tr>
<tr>
<td>Clinical Evidence</td>
<td></td>
</tr>
<tr>
<td>Cochrane Library</td>
<td></td>
</tr>
<tr>
<td>Cogprints</td>
<td></td>
</tr>
<tr>
<td>Conference Proceedings Citation Index Science (formerly ISI Proceedings)</td>
<td></td>
</tr>
<tr>
<td>DIRLINE: Directory of Health Organizations</td>
<td></td>
</tr>
<tr>
<td>EMBASE</td>
<td></td>
</tr>
<tr>
<td>Equator</td>
<td></td>
</tr>
<tr>
<td>Free Medical Journals</td>
<td></td>
</tr>
<tr>
<td>Health and Care Statistics (Welsh Assembly Government)</td>
<td></td>
</tr>
<tr>
<td>HealthCare Republic</td>
<td></td>
</tr>
<tr>
<td>HOWIS: Health of Wales Information Service</td>
<td></td>
</tr>
<tr>
<td>Inside web</td>
<td></td>
</tr>
<tr>
<td>Index to Theses</td>
<td></td>
</tr>
<tr>
<td>IngentaConnect</td>
<td></td>
</tr>
<tr>
<td>ISI Web of Knowledge</td>
<td></td>
</tr>
<tr>
<td>Journal Citation Reports</td>
<td></td>
</tr>
<tr>
<td>Map of Medicine</td>
<td></td>
</tr>
<tr>
<td>MEDLINE</td>
<td></td>
</tr>
<tr>
<td>MIMS (Monthly Index of Medical Specialities)</td>
<td></td>
</tr>
<tr>
<td>National Council for Palliative Care Online Library</td>
<td></td>
</tr>
<tr>
<td>National Institute for Health Research</td>
<td></td>
</tr>
<tr>
<td>National Research Register (NRR) Archive</td>
<td></td>
</tr>
<tr>
<td>NHS Evidence Health Information Resources (formerly National Library for Health)</td>
<td></td>
</tr>
<tr>
<td>Oxford Journals Digital Archive</td>
<td></td>
</tr>
<tr>
<td>Pilots Database</td>
<td></td>
</tr>
<tr>
<td>Proquest psychology Journals</td>
<td></td>
</tr>
<tr>
<td>PsycARTICLES</td>
<td></td>
</tr>
<tr>
<td>PsycINFO</td>
<td></td>
</tr>
<tr>
<td>Registry of Open Access Repositories (ROAR)</td>
<td></td>
</tr>
<tr>
<td>PubMed</td>
<td></td>
</tr>
<tr>
<td>PubMed Central (PMC): a free archive of life sciences journals</td>
<td></td>
</tr>
<tr>
<td>Science Citation Index Expanded (SCI-EXPANDED)</td>
<td></td>
</tr>
<tr>
<td>ScienceDirect</td>
<td></td>
</tr>
<tr>
<td>Social Care Online</td>
<td></td>
</tr>
<tr>
<td>Social Sciences Citation Index (SSCI)</td>
<td></td>
</tr>
<tr>
<td>Statistics (Welsh Assembly Government)</td>
<td></td>
</tr>
<tr>
<td>SwetsWise</td>
<td></td>
</tr>
<tr>
<td>TRIP- Turning Research Into Practice</td>
<td></td>
</tr>
<tr>
<td>UK PubMed Central</td>
<td></td>
</tr>
<tr>
<td>Web of Science</td>
<td></td>
</tr>
<tr>
<td>Welsh Assembly Government Health and Care Statistics</td>
<td></td>
</tr>
<tr>
<td>Your Journals@Ovid</td>
<td></td>
</tr>
<tr>
<td>Zetoc</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2: Differences between Glaserian and Straussian grounded theory

<table>
<thead>
<tr>
<th></th>
<th>Glaserian grounded theory</th>
<th>Straussian grounded theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology</strong></td>
<td>Critical realist</td>
<td>Relativist</td>
</tr>
<tr>
<td><strong>Epistemology</strong></td>
<td>Modified objectivist</td>
<td>Subjectivist</td>
</tr>
<tr>
<td><strong>Paradigm</strong></td>
<td>Neo positivist</td>
<td>Constructivist</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>The initial stage in a research hierarchy that is subsequently verified by experimental or survey research</td>
<td>Constructs a framework for action that is localised, provision and “verified”</td>
</tr>
<tr>
<td><strong>Focuses on:</strong></td>
<td>A substantive area</td>
<td>A phenomenon</td>
</tr>
<tr>
<td><strong>Aim:</strong></td>
<td>To generate an inductive grounded theory</td>
<td>To develop an inductive grounded theory</td>
</tr>
<tr>
<td><strong>Theory</strong></td>
<td>Emphasis on the generation of theory</td>
<td>Emphasis on the validation and verification of the theory and hypotheses</td>
</tr>
<tr>
<td><strong>Starts with:</strong></td>
<td>A general area of interest</td>
<td>A pre-identified problem or curiosity coupled with a sensitising question</td>
</tr>
<tr>
<td></td>
<td><strong>Glaserian grounded theory</strong></td>
<td><strong>Straussian grounded theory</strong></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Researcher's role</strong></td>
<td>Independent</td>
<td>Dialectic and active</td>
</tr>
<tr>
<td><strong>Using the method leads to the:</strong></td>
<td>Emergence of a grounded basic problem</td>
<td>Development of grounded question(s)</td>
</tr>
<tr>
<td></td>
<td>Emergence of grounded question(s)</td>
<td>Development and testing of grounded hypotheses pertaining to a social process</td>
</tr>
<tr>
<td></td>
<td>Emergence of a grounded basic social process</td>
<td></td>
</tr>
<tr>
<td><strong>Founded in:</strong></td>
<td>Symbolic interactionism</td>
<td>Strauss's theory on the continual permutations of action</td>
</tr>
<tr>
<td><strong>Results in:</strong></td>
<td>The generation of a grounded theory hypothesis or hypotheses</td>
<td>Some degree of verified grounded theory</td>
</tr>
<tr>
<td><strong>Results lead to:</strong></td>
<td>Experimental or survey research leading to a verified grounded theory or the limited application of a provisional grounded theory when it “fits” a given situation</td>
<td>An understanding of an issue with a direct pragmatic application enabling problem management</td>
</tr>
<tr>
<td><strong>Sampling</strong></td>
<td>Theoretical sampling guided by the emerging codes until the categories are saturated</td>
<td>Theoretical sampling in three stages: open, relation or variational and discriminatory</td>
</tr>
<tr>
<td><strong>Sources of theoretical sensitivity</strong></td>
<td>Knowledge of coding families, conceptual abilities and literature</td>
<td>Professional experience, personal experience, literature and the analytic process</td>
</tr>
<tr>
<td></td>
<td><strong>Glaserian grounded theory</strong></td>
<td><strong>Straussian grounded theory</strong></td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>Coding phases</strong></td>
<td>Open, theoretical and constant comparative coding</td>
<td>Open, axial and selective</td>
</tr>
<tr>
<td><strong>Initial coding</strong></td>
<td>Substantive coding that is data dependent</td>
<td>Open coding through the use of an analytic technique</td>
</tr>
<tr>
<td><strong>Intermediate coding</strong></td>
<td>Data focused substantive coding continues with an emphasis on abstraction, the refitting of categories and emergent frameworks</td>
<td>Axial coding through the reduction and clustering of categories via a paradigm model</td>
</tr>
<tr>
<td><strong>Final coding</strong></td>
<td>Theoretical coding resulting in the refinement, refitting and integration of categories around an emergent core</td>
<td>Selective coding resulting in the development of detailed categories through the selection and integration of core categories</td>
</tr>
<tr>
<td><strong>Coding framework</strong></td>
<td>Choice from multiple coding families that depends on the best “fit” for the data</td>
<td>Specified coding framework called the paradigm model</td>
</tr>
<tr>
<td><strong>Memos</strong></td>
<td>Primarily for sorting to create a hypothesis</td>
<td>Code, theoretical and operational notes</td>
</tr>
<tr>
<td><strong>Focus on process</strong></td>
<td>Movement over time with a minimum of two stages- a basic social process</td>
<td>Linking of action/ interaction sequences or non-progressive movement</td>
</tr>
<tr>
<td>Category development</td>
<td><strong>Glaserian grounded theory</strong></td>
<td><strong>Straussian grounded theory</strong></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>Relevant categories and properties emerge through the comparison of incidents to incident and or concept to ascertain relevance, fit and emergent patterns until theoretical saturation occurs.</td>
<td>In terms of properties that are then dimensionalised and the categories grouped. Relationships are validated against the data. Gaps in the categories are filled until theoretical saturation is achieved.</td>
</tr>
<tr>
<td>Emergence of category</td>
<td>The basic social process emerges and is the core category that accounts for the majority of variation in the problematic pattern.</td>
<td>Explicating a story line about the central phenomenon around which other categories are integrated using the paradigm model.</td>
</tr>
<tr>
<td>Conditional or Consequential matrix</td>
<td>None, focused on analysis at a micro level only.</td>
<td>Specified and moves between micro and macro levels of analysis.</td>
</tr>
<tr>
<td>Use of literature</td>
<td>Literature only reviewed to support emergent theory.</td>
<td>Preliminary literature review to increase theoretical sensitivity, then main literature review to support emergent theory.</td>
</tr>
</tbody>
</table>
| Evaluation Criteria | **1. Fit**  
**2. Work**  
**3. Relevance**  
**4. Modifiability**  
**5. Parsimony and scope in explanatory power** | **1. Validity, reliability and credibility of the data**  
**2. The research process (7 criteria)**  
**3. Empirical grounding of the study (7 criteria)** |
# EPUAP Pressure Ulcer Classification System (PUCLAS)

## Definition of a Pressure Ulcer
A pressure ulcer is an area of localised damage to the skin and underlying tissue caused by pressure or shear and or a combination of these.

## Grade 1 Pressure Ulcer: *Non-blanchable erythema*

![Grade 1 Image](image)

**Definition of Grade 1**: non-blanchable erythema of intact skin. Discolouration of the skin, warmth, oedema, induration or hardness may also be used as indicators, particularly on individuals with darker skin.
Grade 2 Pressure Ulcer: *Blisters*

**Definition of Grade 2**: partial thickness skin loss involving epidermis, dermis, or both. The ulcer is superficial and presents clinically as an abrasion or blister.
Grade 3 Pressure Ulcer: 

**Superficial ulcer**

**Definition of Grade 3:** Full thickness skin loss involving damage necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia.
Grade 4 Pressure Ulcer: Deep ulcer

Definition of Grade 4: Extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full thickness skin loss.

Adapted from the EPUAP Guide to pressure ulcer grading
http://www.epuap.org/grading.html and the EPUAP pressure ulcer classification system
Appendix 4: NRES South East Wales approval of amended information sheet

22 October 2007

Mr R Samuriwo
PhD Student
C/O C.I.S Lab
Faculty of Health, Sports & Science
University of Glamorgan
Glyndaf Campus, Pontypridd
CF38 1DL

Dear Mr Samuriwo

REC reference number: 07/WSE03/75 The value that nurses attribute to pressure ulcer prevention. Investigator: Mr Ray Samuriwo, PhD Student, University of Glamorgan, C/O C.I.S Lab, Faculty of Health Sport and Science, Glyntaf Campus, Pontypridd, Mid Glamorgan


I acknowledge receipt of the updated Information Sheet, Version 6 dated 18/10/07 and confirm that a copy has been placed on file.

I trust this is satisfactory.

Yours sincerely

Mrs Jagjit Sidhu
Research Ethics Committee
jagjit.sidhu@besc.wales.nhs.uk
Appendix 5: NRES South East Wales confirmation of ethical approval

16 October 2007

Mr Ray Samuirio
PhD Student
University of Glamorgan
C/O C.I.S. Lab, Faculty of Health Sport and Science
Glyntaf Campus, Pontypridd
Mid Glamorgan
CF37 1DL

Dear Mr Samuirio,

Full title of study: The value that nurses attribute to pressure ulcer prevention
REC reference number: 07/WSE0375

Thank you for your letter of 27 September 2007, responding to the Committee’s request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair, Mrs J. Jenkins.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Whilst the study has been approved the Chairman asked that the following changes be made to the information sheet:

Page 3 – Why have I been chosen – should read 'this group' and not 'groups'.

Page 5 – What are the possible benefits of taking part – last sentence 'patient care can be improved' should be revised to read 'patient care can be modified' or something similar.

A copy of the revised information sheet should be forwarded for our files.

Ethical review of research sites

Canolfan Gwasanaethau Busnes
Ty Churchill
17 Ffordd Churchill
Cawood, CF10 2TW
Tel: 029 20 375820 WHTN. 1800
Fax: 029 20 376826

NHS
GIG
Cymru

Canolfan Gwasanaethau Busnes
Churchhill House
17 Churchill Way
Cardiff, CF10 2TW
Telephone: 029 20 378230 WHTN. 1800
Fax: 029 20 376826

Business Services Centre

NHS
Gig
Cymru

 Rwyt, part of Powys Teaching Local Health Board
The Committee has designated this study as exempt from site-specific assessment (SSA). There is no requirement for any of the Local Research Ethics Committees to be informed or for site-specific assessment to be carried out at each site.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>5.4</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Investigator CV</td>
<td>1 - S Balle</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Investigator CV</td>
<td>1 - N Frude</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Investigator CV</td>
<td>1 - R Samuniwa</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Protocol</td>
<td>10</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Covering Letter</td>
<td></td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Compensation Arrangements</td>
<td>Culver Insurance Brokers</td>
<td>19 April 2007</td>
</tr>
<tr>
<td>Interview Schedules/Topic Guides</td>
<td>5</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Advertisement</td>
<td>No Version - Registered Nurses</td>
<td></td>
</tr>
<tr>
<td>Advertisement</td>
<td>Student Nurses</td>
<td></td>
</tr>
<tr>
<td>Letter of invitation to participant</td>
<td>2</td>
<td>27 September 2007</td>
</tr>
<tr>
<td>Letter of invitation to participant</td>
<td>1</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Participant Information Sheet</td>
<td>4</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Participant Information Sheet</td>
<td>5</td>
<td>27 September 2007</td>
</tr>
<tr>
<td>Participant Consent Form</td>
<td>7</td>
<td>27 September 2007</td>
</tr>
<tr>
<td>Participant Consent Form</td>
<td>6</td>
<td>02 August 2007</td>
</tr>
<tr>
<td>Response to Request for Further Information</td>
<td>27 September 2007</td>
<td></td>
</tr>
<tr>
<td>Letter from Gwent Research Risk Review Committee</td>
<td>03 July 2007</td>
<td></td>
</tr>
<tr>
<td>Letter from University of Glamorgan Faculty Ethics Sub Committee</td>
<td>12 April 2007</td>
<td></td>
</tr>
<tr>
<td>Confirmation of registration for MPhil/PhD</td>
<td>30 March 2008</td>
<td></td>
</tr>
<tr>
<td>Pressure Ulcer Classification System</td>
<td>1</td>
<td>02 August 2007</td>
</tr>
</tbody>
</table>

R&D approval

All researchers and research collaborators who will be participating in the research at NHS sites should apply for R&D approval from the relevant care organisation, if they have not yet
done so. R&D approval is required, whether or not the study is exempt from SSA. You should advise researchers and local collaborators accordingly.


Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

Feedback on the application process

Now that you have completed the application process you are invited to give your view of the service you received from the National Research Ethics Service. If you wish to make your views known please use the feedback form available on the NRES website at:

https://www.nresform.org.uk/AppForm/Modules/Feedback/EthicalReview.aspx

We value your views and comments and will use them to inform the operational process and further improve our service.

| 07/WSE03/75 | Please quote this number on all correspondence |

With the Committee’s best wishes for the success of this project

Yours sincerely

Mrs J Jenkins

Chair

Email: jagit.sidhu@bsc.wales.nhs.uk

Enclosures: Standard approval conditions – Non CTIMP

Copy to: R & D Department for Gwent Healthcare NHS Trust

Mrs Karen Roberts, Research Administrator, School of Care Science, University of Glamorgan, Pontypridd. CF37
Appendix 6: University ethical approval

University of Glamorgan
Prifysgol Morgannwg
Faculty of Health, Sport and Science
Cyfaddro lebydd, Chwaraeon a Gwyddoniaeth

12 April 2007

Ray Samuriwo,
E/o Faculty of Sport, Health and Science,
University of Glamorgan.

Dear Mr. Samuriwo,

Faculty Ethics Sub Group Approval – What value do nurses attribute to pressure ulcer prevention?

I am writing to confirm that at its meeting on the 11 April 2007, the Faculty of Health, Sport, and Science Ethics Sub Group approved your submission.

If you have any queries about the group’s decision, please do not hesitate to contact me.

Yours sincerely,

Prof. Joyce Konkre
Chair

cc:
Appendix 7: Trust research approval 1

Mr R Samurito
C/o C.I.S. Lab
Faculty of Health Sports and Science
University of Glamorgan
Glyntaf Campus
Pontypridd
Mid Glamorgan
CF37 4BD
Ref: RRR-585/07
5th July 2007

Dear Mr Samurito
Re: What value do nurses attribute to pressure ulcer prevention?
Reg: RD/585/07

Thank you for your response to the Research Risk Review Committee’s letter dated 15th June 2007.

The clarifications are satisfactory and Chairman’s Action has been taken and your project is approved.

Therefore the Trust is happy for your study to begin subject to it receiving ethical approval from the appropriate MREC and/or LREC, and Honorary Contracts, where required, being in place. Please forward a copy of this letter to the ethics committee. Once you have ethical approval, please forward a copy of the letter to the Research and Development Office at the above address.

May I take this opportunity to wish you success with your study and remind you that as Principal Investigator you are required to do the following:

a) Inform the Trust R&D Office if any external funding is awarded for this study in the future
b) Maintain a record of the number of research participants are recruited into the study
c) Complete any questionnaires sent to you by the Trust R&D Office regarding this project
d) Comply fully with the Research Governance Framework, and co-operate with any audit inspection of the project files

e) Undertake the project in accordance with ICH-GCP and the Trust's Guidelines on Good Research Practice

f) Adhere to the protocol as approved by the Local Research Ethics Committee

g) Ensure that your research complies with the Data Protection Act 1998

h) Report any serious adverse events to the R&D Office

i) If your project involves collaboration with primary care organisations, it is your responsibility to contact the relevant LHBs to inform them of your project and to confirm their research governance arrangements.

j) If you do not commence your project within 12 months of approval being given by the Research Risk Review Committee, you must inform the R&D Office of the delay

This approval is conditional of your project receiving approval by the Research Ethical Committee.

Yours sincerely

[Signature]

Dr Alex Anstey
Chairman
Research Risk Review Committee
Appendix 8: Trust research approval 2

Mr R Samuriwo  
C/o C.T.S. Lab  
Faculty of Health Sports and Science  
University of Glamorgan  
Glyndaf Campus  
Pontypridd  
Mid Glamorgan  
CF37 4BD

Ref: RSC.322.07  
5th July 2007

Dear Mr Samuriwo  

Re: What value do nurses attribute to pressure ulcer prevention?  
Reg: RD/585/07

Thank you for your response to the queries raised by the Research Scrutiny Committee at their meeting held on 13th June 2007.

Your clarifications to the queries raised are satisfactory, therefore I am happy to take Chairman’s Action and approve your project.

I wish you every success with this project.

Yours sincerely,

Dr Helen Jackson  
Chairman  
Research Scrutiny Committee

www.gwent-tr.wales.nhs.uk

Page 254 of 283
The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

677WSE01373: Please quote this number on all correspondence

Yours sincerely,

Mrs. Jagjit Sidhu
Committee Co-ordinator

E-mail: jagjit.sidhu@bsc.wales.nhs.uk

Copy to: Mrs Karen Roberts, University of Glamorgan
R&D office for Gwent Healthcare NHS Trust
Appendix 9: Information sheet

A study about nurses and their experiences of trying to prevent pressure ulcers.

Information Sheet

You are invited to take part in a research study about nurses and their experiences of preventing pressure ulcers. This study is supervised by the University of Glamorgan and will be monitored by the Gwent Healthcare NHS Trust. This study has been approved by the South East Wales Local Research Ethics Committee (LREC).

Chief Investigator
Ray Samuriwo

Project Supervisors
Professor Sue Bale
Professor Neil Frude
Dr Allyson Lipp
A research study about nurses about their experiences of trying to prevent pressure ulcers.

**Information sheet**

**Invitation**

**Dear Sir/Madam**

We would like to invite you to take part in a research study about nurses and their experiences of trying to prevent pressure ulcers. Before you decide if you would like to participate, you need to understand why the research is being done and what it will involve for you. Please take time to read the following information sheet carefully. Talk to others about the study if you wish.

(Part 1 of this information sheet tells you the purpose of this study and what will happen to you if you take part. Part 2 of this information sheet gives you more detailed information about the conduct of the study).

If anything is not clear or if you would like to know more information the study, please contact the Chief Investigator (contact details are given on the last page). Take time to decide whether or not you wish to take part. Thank you for taking the time to read this information sheet.

**Information sheet Part 1**

**What is this research study about?**

The research study is about nurses and their experiences of preventing pressure ulcers.

**What is the purpose of the study?**

The aim of this study is to find out how pressure ulcer prevention relates to the other aspects of the nurse’s role and how this manifests itself in the way that nurses work. To help us to find out the answer to this question we are asking you to participate in this study. This study aims to answer this question by interviewing Registered Nurses and Student Nurses and finding out about their experiences. This is a different approach to most research about pressure ulcers, which tends to use questionnaires about things that the researcher thinks are important. This study also forms part of the main Chief Investigator’s post graduate studies.

**Why have I been chosen?**

We are inviting all nurses working in the Adult Non Acute Medical Wards of the Acute Division of the Gwent Healthcare NHS Trust who have looked after patients with pressure ulcers. This group of nurses was chosen because they are the most likely to come across patients with, or at high risk of developing pressure ulcers within this Trust.

We are also inviting all the Adult Branch student nurses from the University of Glamorgan who have worked in the Adult Non Acute Medical Wards of the Acute Division of the Gwent Healthcare NHS Trust and have helped to look after patients with pressure ulcers. This group of student nurses was selected because these students are the most likely to have cared for
patients with pressure ulcers in this Trust.

**Do I have to take part?**

It is entirely up to you to decide whether or not to participate. We will describe the study and go through this information sheet, which we will then give to you. We will then ask you to sign the consent form that is enclosed to show that you have agreed to take part. If you agree to take part in this study, please sign the consent form and return it in the stamped addressed envelope. A signed copy of this consent form will be given to you. If you decide to take part you are free to change your mind and withdraw your permission at any time without giving a reason or explanation.

**What will happen to me if I take part?**

If you agree to participate, you will be asked to sign a consent form and return it in the stamped addressed envelope. You will be asked to participate in a 60-90 minute interview that will be recorded on audiotape. The data obtained from these interviews will be analysed and used to create a theory about nurses' experiences of pressure ulcer prevention.

Time off for you to participate in this study will be negotiated with your Ward Manager/Lecturer so you do not have to spend any of your own free time.

The interviews for Registered Nurses will be undertaken away from the ward or in a room at the Hospital that you work in order to avoid interruptions during the course of the interview. The interviews for Student Nurses will be undertaken in a room at the University of Glamorgan (for Student Nurses) in order to avoid interruptions during the course of the interview.

**How much of my time will this study take up?**

If you choose to participate in this study you will not have to sacrifice any of your time. This is because permission for you to be given time off to participate in this study has been obtained from Gwent Healthcare NHS Trust/University of Glamorgan. The interviews are expected to last for 60-90 minutes. Time off for you to participate in this study will be negotiated with your Ward Manager/Lecturer so you do not have to spend any of your own free time.

**What do I have to do?**

If you decide to participate in this study please complete the attached consent form and return it in the stamped addressed envelope. We will then contact you to arrange a suitable date and time for the interview. If you decide not to participate, then no further action is required. In any case, I would like to thank you for taking the time to read this information sheet.

**What are the possible disadvantages and risk of taking part?**

You will be asked to talk about you experiences of preventing pressure ulcers, which may force you to relive some unpleasant memories.

If this happens supportive measures are in place including a Senior Nurse in the Trust and a Student Support Counsellor for Student Nurses to discuss any issues that may arise, during or after the interviews. Full details about the supportive measures will be given to you by the
Chief Investigator before the interviews begin.

**What are the possible benefits of taking part?**

Your participation in this study will help to illustrate nurses’ experiences of trying to prevent pressure ulcers in clinical practice. The findings of this study will to clarify what nurses’ experience in trying to prevent pressure ulcers in their patients. It is hoped that by better understanding what nurses go through in trying to prevent pressure ulcers, patient care can be modified.

**What happens when the study stops?**

If you decide to participate in this study your role in the research ends once the interviews are complete, unless you have further information you would like to add in which case you can contact the Chief Investigator at the address provided on the last page. The information obtained from the interviews will be analysed and the results presented in the form of a report and a thesis. If you would like a copy of the final report then you can contact the Chief Investigator at the address at the end of this information sheet.

**What if there is a problem?**

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2 of this Information sheet.

**Will my taking part in the study be kept confidential?**

Yes. We will follow ethical and legal practice and all information about you will be handled in confidence. The details are included in Part 2 of this information sheet.

*This completes Part 1 of this Information sheet.*

*If the information in Part 1 of this information sheet has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.*

**Information sheet Part 2**

**What will happen if I don’t want to carry on with the study?**

If you decide to take part you are free to change your mind and withdraw your permission at any time without giving a reason or explanation. Any data that may have been obtained from you will be destroyed.

**What if there is a problem?**

It is unlikely that something will go wrong as the research will be performed in line with the Gwent Healthcare NHS Trust and the University of Glamorgan’s policies and procedures. If there are any untoward events that occur or issues that arise then please inform the Chief Investigator and follow the procedure outlined in the Gwent Healthcare NHS Trust and University of Glamorgan’s policies for dealing with adverse events.
Complaints

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions (the Chief Investigator’s contact details are given on the last page). If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure, the Gwent Healthcare NHS Trust Research and Development Office, for Registered Nurses and the University of Glamorgan Faculty of Health Sport and Science Research Office for student Nurses. Details about the Research offices for the Trust and the University are available from the Hospital/University and via the intranet and the internet.

Indemnity and Compensation

In the event that something does go wrong and you are harmed during the research and this is due to someone’s negligence then you may have grounds for a legal action for compensation against the University of Glamorgan but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you (if appropriate).

This study is being undertaken under the auspices of the University of Glamorgan that has robust indemnity procedures which are in place. This study is insured through the University of Glamorgan’s insurers, further details are available on request (please contact the Chief Investigator at the address given on the last page).

This insurance covers the Chief Investigator for any harm that may arise through negligence in this study. There are no special measures in place for any harm that may arise through non negligence. Hence, this study is not insured for harm that may arise through non negligence.

Will my taking part in this study be kept confidential?

The interviews will be audio taped and transcribed. The tapes and transcripts will be kept under lock and key for 15 years in line with the latest guidance from the National Research Ethics Service (NRES). It will be securely disposed of after 15 years.

All information which is collected about you during the course of the study will be kept strictly confidential. Any information from this study that is reviewed by third parties for publication or review will have your name and all identifiable details removed from all relevant documents, so that you cannot be recognised.

Nothing that can identify you will be typed on to the transcripts or attached to any electronic information pertaining to the study. Your anonymity will be protected by the use of a code to represent you on all the records of the interview (i.e. transcripts and electronic data).

The key to the code will be known only to the Chief Investigator and will be kept in a locked cupboard in the University of Glamorgan. Any physical data obtained will be kept under lock and key and any electronic data will be stored in a password protected computer that is kept under lock and key. The consent forms will also be stored under lock and key at the University of Glamorgan.

All physical and electronic information pertaining to this study will be kept under lock and key for 15 years in line with the latest guidance from the National Research Ethics Service (NRES). It will be securely disposed of after 15 years. The Chief Investigator is the only
person during this time (15 years) who will be able to access any information that can identify you.

Your privacy is of the utmost importance in this study. However, it must be acknowledged that you and the Chief Investigator are bound to act in line with Professional Code of Conduct for Nurses. Therefore if you highlight any instances of dangerous or unsafe practice, then the Chief Investigator is obliged to relay this information to the appropriate authorities.

**What will happen to the results of the study?**

All the data from this study will be anonymised prior to its dissemination. The findings of this study will be reported and disseminated in peer reviewed scientific journals and presentations at conferences. The findings of this study will also form part of the Chief Investigator’s written submission for a PhD. If you wish to receive a copy of the results then please indicate this to the Chief Investigator during the course of the study or contact the Chief Investigator at the address provided on the last page.

**Who is organising and funding the research?**

This research has been organised by the Chief Investigator and is being funded by the University of Glamorgan. This research is being supervised by the University of Glamorgan and will be monitored by Gwent Healthcare NHS Trust.

**Who has reviewed the study?**

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity. This study has been reviewed and approved by the University of Glamorgan, Gwent Healthcare NHS Trust and the South East Wales Local Research Ethics Committee (LREC).

**Further information and contact details**

1. **General information about research is available:**

   a) On the internet: from the Royal College of Nursing Website, the Gwent NHS Healthcare website and The University of Glamorgan’s website.

   b) From the Gwent Healthcare NHS Trust Research and Development Office that can be contacted via the Trust switchboard. The contact details for the Gwent Healthcare Trust’s Research and Development are also available via the Trust intranet.

   c) From the University of Glamorgan Faculty of Health Sport and Science Research Office that can be contacted via the university’s switchboard or the university intranet.
2. For specific information about this research study please contact the Chief Investigator:

Ray Samuriwo  
C/o C.I.S Lab  
Faculty of Health Sports and Science  
University of Glamorgan  
Glyntaff Campus  
Pontypridd, Mid Glamorgan  
CF37 1DL  
Tel: 01443 483085 (Office hours Tuesday to Thursday)  
Email: rksamuri@glam.ac.uk

3. For advice as to whether you should participate please contact:  
The Chief Investigator in the first instance (contact details are given above).  
If you wish to speak to someone independent, that is someone not directly involved in the study please contact:  
a) The Gwent Healthcare NHS Trust Research and Development Office (contact details are available via the Hospital switchboard, the Internet and the Trust Intranet).  
b) Or the University of Glamorgan Faculty of Health Sport and Science Research Office (contact details are available via the university switchboard, the internet and the university intranet).  
c) Or your Professional Trade Union (contact details should be stated on your membership card and available on the internet).

4. If I am unhappy with the conduct of the interview who can I contact?  
The Chief Investigator in the first instance (contact details are given below):  

Ray Samuriwo  
C/o C.I.S Lab  
Faculty of Health Sports and Science  
University of Glamorgan  
Glyntaff Campus  
Pontypridd, Mid Glamorgan
5. **If you wish to someone independent, that is someone not directly involved in the study please contact:**
   
a) The Gwent Healthcare NHS Trust Research and Development office (contact details are available via the Hospital switchboard, the internet and the Trust Intranet).
   
b) Or the University of Glamorgan Faculty of Health Sport and Science Research office (contact details are available via the university switchboard, the internet and the university intranet).
   
c) Or your Professional Trade Union (contact details should be stated on your membership card and available on the internet).

6. **Chief Investigator’s contact details**

   Ray Samuriwo  
   C/o C.I.S Lab  
   Faculty of Health Sports and Science  
   University of Glamorgan  
   Glyntaff Campus  
   Pontypridd, Mid Glamorgan  
   CF37 1DL  
   Tel: 01443 484509 (24hr Voicemail service)  
   Email: rksamuri@glam.ac.uk
Appendix 10: Consent Form

Centre Number:  
Study Number:  
Participant Identification Number for this study:  

CONSENT FORM

Title of Project: A study of nurses about their experiences of trying to prevent pressure ulcers.

Name of Researcher: Ray Samuriwo

Please initial box

1. I confirm that I have read and understand the information sheet dated 27 September 2007 (version 7) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. □

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected. □

3. I understand that relevant sections of my data collected during the study, may be looked at by individuals from the University of Glamorgan or from regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records. □

4. I agree to take part in the above study. □

___________________________        ____________________      _________________  
Name of Participant            Date                       Signature

___________________________        ______________________     __________________  
Name of Person             Date          Signature  

taking consent

When completed, 1 for participant; 1 (original) for researcher site file.
Appendix 11: Initial stem questions

The participants in this study will be asked the following questions (note that these stem questions may change as the study evolves) in the individual interviews.

1. Can you tell me about the types of places that you have worked as a nurse and the types of patients that you have looked after?
2. Can you tell me about your experiences of looking after patients with pressure ulcers?
3. What are your experiences of trying to prevent pressure ulcers in patients?
4. Can you tell me about some of the memorable situations that you have shared with fellow nurses in trying to prevent pressure ulcers?
5. What do you think about the standard of pressure area care that was given by your colleagues? Are there any particular incidents that come to mind?
6. What do your colleagues think about pressure ulcers and their prevention?
7. How do you think pressure ulcer prevention is perceived by nurses?
8. From your experiences, what aspects of a nurse’s job are noticed and improve a nurse’s prospects of promotion?
9. How important to nurses do you think pressure ulcer prevention is compared to something like preventing MRSA?
10. What are your views on the education and training that you have been given on pressure ulcer prevention?
11. If you were in charge of training both registered and student nurses what would you teach them about preventing pressure ulcers?
Appendix 12: NRES South East Wales approval of progress report

South East Wales Research Ethics Committees - Panel C
Direct Line: 02920 375825/375822
Facsimile: 02920 376835

09 February 2009

Mr Roy Samuriko
PhD Student
C/O C.I.S Lab, Faculty of Health Sport and Science
Glyndwr Campus, Pontypridd
Mid Glamorgan
CF37 1DL

Dear Mr Samuriko

Study title: The value that nurses attribute to pressure ulcer prevention
REC reference: 07/WSE63/75

Thank you for sending the progress report for the above study dated 06 February 2009. The report will be reviewed by the Chair of the Research Ethics Committee, and I will let you know if any further information is requested.

The favourable ethical opinion for the study continues to apply for the duration of the research.

07/WSE63/75: Please quote this number on all correspondence

Yours sincerely

Jagjit Sidhu
Deputy Executive Officer
South East Wales Research Ethics Committee
E-mail: Jagjit.Sidhu@bsc.wales.nhs.uk
25 February 2009

Mr K Samuniwo,
C/o Faculty of Health, Sport and Science,
University of Glamorgan.

Dear Mr Samuniwo,

'The value that nurses attribute to pressure ulcer prevention'
[FESE 07/76]

I am writing to confirm that on the 24th February 2009, the Faculty of Health, Sport, and Science Ethics Sub Group approved your requested six month extension to ethical approval for the study named above. This extension is granted with immediate effect.

If you have any queries about the group's decision, please do not hesitate to contact me.

Yours sincerely,

[Signature]

Prof. Paul Rogers
Chair
Appendix 14: Trust approval for extension of study

Mr Ray Samario
C/o C.I.S. Lab
Faculty of Health, Sports & Science
University of Glamorgan
Glyndwr Campus
Pontypridd
Mid- Glamorgan
South Wales
CF37 1DL

Ref: RRR 30/09
9th February 2009

Dear Ray,

What value do nurses attribute to pressure ulcer prevention?
Reg: RD/585/97

Thank you for your letter dated 27th January 2009 informing the Committee of the amendments for the above named study.

The Committee approved and noted this amendment at its meeting on the 4th February 2009.

Yours sincerely,

[Signature]
Rosalind Howell (MSc)
Acting Chairman
Research Risk Review Committee

www.gwent-tr.wales.nhs.uk

Research & Development
Research Risk Review Committee
Tel: 01633 238138
Appendix 15: NRES South East Wales approval of extension of study

South East Wales Research Ethics Committee Panel C
Direct Line: 02920 376823/376822
Fax: 02920 376035

09 February 2009

Mr Ray Samuriwlo
PhD Student
G C1.5 Lab, Faculty of Health Sport and Science
Glyndwr Campus, Pontypridd
Mid Glamorgan
CF37 1DL

Dear Mr Samuriwlo

Study title: The value that nurses attribute to pressure ulcer prevention
REC reference: 07/WSE03/75
Protocol number: 10
Amendment number: Extension - December 2008 to June 2009
Amendment date: 06 February 2009

Thank you for your letter of 06 February 2009, notifying the Committee of the above amendment.

The Committee does not consider this to be a "substantial amendment" as defined in the Standard Operating Procedures for Research Ethics Committees. The amendment does not therefore require an ethical opinion from the Committee and may be implemented immediately, provided that it does not affect the approval for the research given by the R&D office for the relevant NHS care organisation.

Documents received

The documents received were as follows:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notification of a Minor Amendment</td>
<td>Extension - December 2008 to</td>
<td>06 February 2009</td>
</tr>
<tr>
<td></td>
<td>June 2009</td>
<td></td>
</tr>
</tbody>
</table>

Statement of compliance

Canolfan Gwasanaethau Busnes
Ty Churchill
17 Flovud Churchill
Cardiff CF10 2YW
FAX: 029 20 376926

NHS
GIG

NHS
GIG

Canolfan Gwasanaethau Busnes
Ty Churchill
17 Flovud Churchill
Cardiff CF10 2YW
FAX: 029 20 376926

Business Services Centre
Churchill House
17 Churchill Way
Cardiff CF10 2YW
Telephone: 029 20 376826
Fax: 029 20 376826

rhan@addysg@bwrddledy@Llwyd@Powyys@pem@Powyys@Teaching Local Health Board
Appendix 16: Amended stem questions (for nurse educators)

The participants in this study will be asked the following questions (note that these stem questions may change as the study evolves) in the individual interviews.

1. Can you tell me about the types of places that you have worked as a nurse and the types of patients that you have looked after?
2. Can you tell me about your experiences of looking after patients with pressure ulcers?
3. How important to nurses do you think pressure ulcer prevention is compared to something like preventing MRSA?
4. Where do pressure ulcers sit in the pre-registration nursing curriculum?
5. How much time is spent teaching pressure ulcer prevention in the pre-registration training?
6. How much of the teaching on pressure ulcers is theoretical and how much is practical?
7. How do you evaluate the student nurses understanding of the teaching that they have received on pressure ulcers?
8. What do you think about using pictures of pressure ulcers to teach students as an alternative to seeing real life pressure ulcers?
9. What do you expect students to learn about pressure ulcers in clinical practice and university?
10. What does basic nursing care mean to you?
11. What do you think is the attitude of nursing students towards basic nursing care?
12. What do you think of the sentiment that there are some students who are not interested in hands-on care?
13. What do you think about the students’ sentiments about their pre-registration training?
Appendix 17: Amended stem questions (for senior nurses)

The participants in this study will be asked the following questions (note that these stem questions may change as the study evolves) in the individual interviews.

1. Who decides what care plans are used and how they are completed?
2. What do you think about the staff patient ratios on your wards and the workload that each registered nurse is expected to deal with?
3. What educational and training opportunities are available for the staff on your wards particularly on wounds and pressure ulcer prevention?
4. What do you think about the equipment and resources that are available to the staff on your wards in order to prevent pressure ulcers?
5. What are your clinical priorities as a nurse manager?
6. What qualities do you look for in your nursing staff when it comes to promotion?
7. How do you work out who merits promotion, does clinical expertise matter or is it superseded by courses and qualifications?
8. What do you think about the manner in which nurses prioritise their work?
9. Do you think that some aspects of nursing are more prestigious than others and do you think those views are widely held?
10. What do you think about the fact that the nurses say that they are too busy doing other things to spend time with the patients in their care?
11. What do you think about the manner in which nurses undertake their clinical practice i.e. how they prioritise their work?
## Appendix 18: Open codes

<table>
<thead>
<tr>
<th>Anything else to say</th>
<th>Intervention prestige</th>
<th>Real P.U. vs. simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant qualities sought</td>
<td>Length of service</td>
<td>Responsibility/accountability</td>
</tr>
<tr>
<td>Auxiliaries education and training</td>
<td>Lessons learnt from Infection Control</td>
<td>Settings worked in</td>
</tr>
<tr>
<td>Basic care- definition</td>
<td>Management priorities</td>
<td>Situations encountered</td>
</tr>
<tr>
<td>Basic care- personal view</td>
<td>Media</td>
<td>Sources of help or advice</td>
</tr>
<tr>
<td>Bed management vs. care delivery</td>
<td>Nurses views of P.U. prevention</td>
<td>Staffing levels</td>
</tr>
<tr>
<td>Calibre of education and training</td>
<td>Opportunities for education and training</td>
<td>Staff-patient ratio</td>
</tr>
<tr>
<td>Calibre of P.U. care given</td>
<td>Origins of patients</td>
<td>Student attitude</td>
</tr>
<tr>
<td>Care plans</td>
<td>P.U. prevention vs. treatment</td>
<td>Student competence</td>
</tr>
<tr>
<td>Care plans- turn's charts</td>
<td>P.U. vs. heart attack, etc.</td>
<td>Student expectations</td>
</tr>
<tr>
<td>Characteristics of failures</td>
<td>P.U. vs. MRSA nurses view</td>
<td>Supervision of junior colleagues</td>
</tr>
<tr>
<td>Colleagues views on P.U. view</td>
<td>P.U. vs. MRSA patient-family view</td>
<td>Theory-practice gap in education and training</td>
</tr>
<tr>
<td>Courses taken</td>
<td>P.U. vs. MRSA personal view</td>
<td>Tissue viability nurse support</td>
</tr>
<tr>
<td>Desirable attributes</td>
<td>P.U. vs. MRSA public view</td>
<td>Types of patients</td>
</tr>
<tr>
<td>Dietician</td>
<td>Past experiences</td>
<td>University based teaching</td>
</tr>
<tr>
<td>Doctors</td>
<td>Patient qualified nurse contact</td>
<td>Unqualified vs. qualified nurses</td>
</tr>
<tr>
<td>Doctors vs. drugs.</td>
<td>Patient turnover</td>
<td>Updates and study days</td>
</tr>
<tr>
<td>Equipment and resource availability</td>
<td>Patient-Family views on P.U. prevention</td>
<td>Ward based teaching</td>
</tr>
<tr>
<td>Exposure to bad P.U.</td>
<td>Personal preference</td>
<td>Ward environment</td>
</tr>
<tr>
<td>First P.U. seen</td>
<td>Pharmacist</td>
<td>Ward environment improvement</td>
</tr>
<tr>
<td>Fitting in</td>
<td>Physiotherapist</td>
<td>Ward innovations</td>
</tr>
<tr>
<td>Frequency of P.U. on ward</td>
<td>Post-registration education and training</td>
<td>Ward philosophy</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>General support</td>
<td>Pre-registration education and training</td>
<td>What gets noticed</td>
</tr>
<tr>
<td>Grades of P.U.</td>
<td>Pressure ulcers</td>
<td>Work pattern</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>Pressure ulcers are</td>
<td>Worst P.U. measures taken</td>
</tr>
<tr>
<td>Hospital vs. community</td>
<td>Public perception improvement</td>
<td>Worst P.U. patient family reaction</td>
</tr>
<tr>
<td>Impediments to care delivery</td>
<td>Qualifications vs. hands on care</td>
<td>Worst P.U. patient outcome</td>
</tr>
<tr>
<td>Improvement of education and training</td>
<td>Qualified reviews of patient's skin</td>
<td>Worst P.U. seen</td>
</tr>
<tr>
<td>Influences on task prioritisation</td>
<td>Real P.U. vs. pictures</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 19: Reorganisation of open codes into sub categories

<table>
<thead>
<tr>
<th>Basic care</th>
<th>Professional responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic care- definition</td>
<td>Health and Safety</td>
</tr>
<tr>
<td>Basic care- personal view</td>
<td>Responsibility/accountability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comprehension</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anything else to say</td>
<td>Equipment and resource availability</td>
</tr>
<tr>
<td>Pressure ulcers are</td>
<td>Lessons learnt from Infection Control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career advancement</th>
<th>Societal perceptions</th>
<th>Pressure ulcer comparators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant qualities sought</td>
<td>Colleagues views on P.U.</td>
<td>P.U. vs. heart attack, etc.</td>
</tr>
<tr>
<td>Characteristics of failures</td>
<td>Media</td>
<td>P.U. vs. MRSA nurses view</td>
</tr>
<tr>
<td>Desirable attributes</td>
<td>Nurses views of P.U. prevention</td>
<td>P.U. vs. MRSA patient-family view</td>
</tr>
<tr>
<td>Past experiences</td>
<td>P.U. prevention vs. treatment</td>
<td>P.U. vs. MRSA personal view</td>
</tr>
<tr>
<td>Qualifications vs. hands on care</td>
<td>Patient-Family views on P.U. prevention</td>
<td>P.U. vs. MRSA public view</td>
</tr>
<tr>
<td>What gets noticed</td>
<td>Public perception improvement</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students</th>
<th>Worst P.U. seen</th>
<th>Calibre of care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student attitude</td>
<td>Worst P.U. measures taken</td>
<td>Calibre of P.U. care given</td>
</tr>
<tr>
<td>Student competence</td>
<td>Worst P.U. patient family reaction</td>
<td>Care plans</td>
</tr>
<tr>
<td>Student expectations</td>
<td>Worst P.U. patient outcome</td>
<td>Care plans- turn’s charts</td>
</tr>
<tr>
<td></td>
<td>Worst P.U. seen</td>
<td>Impediments to care delivery</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td><strong>M.D.T</strong></td>
<td><strong>Task prioritisation</strong></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Exposure to bad P.U.</td>
<td>Dietician</td>
<td>Bed management vs. care delivery</td>
</tr>
<tr>
<td>First P.U. seen</td>
<td>Doctors</td>
<td>Doctors vs. drugs.</td>
</tr>
<tr>
<td>Grades of P.U. seen</td>
<td>General support</td>
<td>Influences on task prioritisation</td>
</tr>
<tr>
<td>Length of service</td>
<td>Pharmacist</td>
<td>Intervention prestige</td>
</tr>
<tr>
<td>Pressure ulcers</td>
<td>Physiotherapist</td>
<td>Patient qualified nurse contact</td>
</tr>
<tr>
<td>Settings worked in</td>
<td>Sources of help or advice</td>
<td>Personal preference</td>
</tr>
<tr>
<td>Situations encountered</td>
<td>Tissue viability nurse support</td>
<td>Qualified reviews of patient's skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unqualified vs. qualified nurses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Education and training</strong></th>
<th><strong>Ward environment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliaries education and training</td>
<td>Fitting in</td>
</tr>
<tr>
<td>Calibre of education and training</td>
<td>Frequency of P.U. on ward</td>
</tr>
<tr>
<td>Courses taken</td>
<td>Hospital vs. Community</td>
</tr>
<tr>
<td>Improvement of education and training</td>
<td>Management priorities</td>
</tr>
<tr>
<td>Opportunities for education and training</td>
<td>Origins of patients</td>
</tr>
<tr>
<td>Post-registration education and training</td>
<td>Patient turnover</td>
</tr>
<tr>
<td>Pre-registration education and training</td>
<td>Staffing levels</td>
</tr>
<tr>
<td>Real P.U. vs. pictures</td>
<td>Staff-patient ratio</td>
</tr>
<tr>
<td>Real P.U. vs. simulation</td>
<td>Supervision of junior colleagues</td>
</tr>
<tr>
<td>Theory-practice gap in education and training</td>
<td>Types of patients</td>
</tr>
<tr>
<td>University based teaching</td>
<td>Ward environment</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Updates and study days</td>
<td>Ward environment improvement</td>
</tr>
<tr>
<td>Ward based teaching</td>
<td>Ward innovations</td>
</tr>
<tr>
<td></td>
<td>Ward philosophy</td>
</tr>
<tr>
<td></td>
<td>Work pattern</td>
</tr>
</tbody>
</table>
## Appendix 20: Restructuring of subcategories into categories

<table>
<thead>
<tr>
<th>Sub category</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comprehension</td>
<td>1. Understanding</td>
</tr>
<tr>
<td>2. Pressure ulcer comparators</td>
<td></td>
</tr>
<tr>
<td>3. Experience</td>
<td>2. Experience</td>
</tr>
<tr>
<td>4. Worst P.U. seen</td>
<td></td>
</tr>
<tr>
<td>5. Education and training</td>
<td>3. Educational preparation</td>
</tr>
<tr>
<td>6. Students</td>
<td></td>
</tr>
<tr>
<td>7. Career advancement</td>
<td>4. Professional influences</td>
</tr>
<tr>
<td>8. MDT</td>
<td></td>
</tr>
<tr>
<td>10. Ward environment</td>
<td></td>
</tr>
<tr>
<td>11. Other</td>
<td>6. Quality of Care</td>
</tr>
<tr>
<td>12. Basic care</td>
<td></td>
</tr>
<tr>
<td>13. Calibre of care</td>
<td>7. Clinical prioritisation</td>
</tr>
<tr>
<td>14. Societal perceptions</td>
<td></td>
</tr>
<tr>
<td>15. Task prioritisation</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 21: Reclassification of categories into possible core categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Possible core category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Understanding</strong> (of pressure ulcer formation, treatment and prevention and importance of pressure ulcer prevention)</td>
<td>Individual perception (of the value of pressure ulcer prevention)</td>
</tr>
<tr>
<td><strong>2. Experience</strong> (of looking after patients with high grade pressure ulcers and nursing experience)</td>
<td></td>
</tr>
<tr>
<td><strong>3. Educational preparation</strong> (on pressure ulcer formation, treatment and prevention)</td>
<td></td>
</tr>
<tr>
<td><strong>4. Professional influences</strong> (that affect nurses’ pressure ulcer prevention practices)</td>
<td>External factors (that affect the delivery of care that is consistent with the value placed on pressure ulcer prevention)</td>
</tr>
<tr>
<td><strong>5. Clinical influences</strong> (that affect nurses’ pressure ulcer prevention practices)</td>
<td></td>
</tr>
<tr>
<td><strong>6. Quality of Care</strong> (that patients receive from nurses, especially to maintain their skin integrity)</td>
<td>Prioritisation and delivery of care (with regards to pressure ulcer prevention)</td>
</tr>
<tr>
<td><strong>7. Clinical prioritisation</strong> (of pressure ulcer prevention and the factors that affect the prioritisation of pressure ulcer prevention)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 22: An example of how coding progressed

<table>
<thead>
<tr>
<th>Open codes</th>
<th>Sub Category</th>
<th>Core Category</th>
<th>Possible Core Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant qualities sought</td>
<td>Past experiences</td>
<td>Professional influences</td>
<td>External factors (that affect the delivery of care that is consistent with the value placed on pressure ulcer prevention)</td>
</tr>
<tr>
<td>Characteristics of failures</td>
<td>Qualifications vs. hands on care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desirable attributes</td>
<td>What gets noticed</td>
<td>Career advancement</td>
<td></td>
</tr>
<tr>
<td>Dietician</td>
<td>Physiotherapist</td>
<td>MDT</td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td>Sources of help or advice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General support</td>
<td>Tissue viability nurse support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacist</td>
<td></td>
<td>Professional responsibility</td>
<td></td>
</tr>
<tr>
<td>Health and Safety</td>
<td>Responsibility/accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fitting in</td>
<td>Patient turnover</td>
<td>Clinical influences</td>
<td></td>
</tr>
<tr>
<td>Frequency of P.U. on ward</td>
<td>Staffing levels</td>
<td>(that affect nurses’ pressure ulcer prevention practices)</td>
<td></td>
</tr>
<tr>
<td>Hospital vs.</td>
<td>Staff-patient ratio</td>
<td>Ward environment</td>
<td></td>
</tr>
<tr>
<td>Community Management priorities</td>
<td>Supervision of junior colleagues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Origins of patients</td>
<td>Types of patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment and resource availability</td>
<td>Lessons learnt from Infection Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Progression of Coding
Appendix 23: Use of memos in coding

Open code: Grades of pressure ulcers seen

Cerys (Deputy Ward Manager, qualified 20+ years): “When I first started nursing years ago, you would commonly see grade three and grade four pressure ulcers. Now, it’s such a rarity to see a grade three or four pressure ulcer, but I have seen grade four pressure ulcers recently. One was the result of a surgical procedure where the skin had never healed and ulcerated and the other grade four pressure ulcers were in patients who had come into us from other care establishments.”

Leah (2nd year student, Auxiliary Nurse for 13+ years): “I’ve seen all the grades of pressure ulcers from the initial red stage right the way through to when it’s really bad, it’s really mucky, it has pseudomonas, is not healing and eventually the patient dies. When I first started nursing about eleven years ago, you tended to see more potential pressure ulcers and the lesser grades (of pressure ulcers). Nowadays, I’m either seeing the beginnings of a pressure ulcer or the really serious full-blown extreme grades of pressure ulcers. It’s as if there’s no middle ground now, it’s as if the patients go home or they’re in Hospital and their pressure ulcers just get worse very, very quickly. But overall, the pressure ulcers we’re seeing now are worse than those in years gone by.”

Memo-grades of P.U. seen

The participants have quite clearly come across pressure ulcers in their practice, but they point out that the grades of pressure ulcers that they see nowadays have changed. The suggestion is that grade two and three pressure ulcers are less prevalent on the wards than they used to be. The participants still occasionally encounter patients with grade four pressure ulcers, who tend to originate from elsewhere or have some other underlying cause. So, the participants seem to be missing out seeing patients with grade two and three pressure ulcers. Why is this?

What has changed in the last 10-15 years to change the types of patients with pressure ulcers that they see? Why is it that they seem to see either the beginning of a pressure ulcer or a really high grade pressure ulcer? I need to look at this more closely and find some answers. Where are the patients being looked after when their pressure ulcers deteriorate to grade two and grade three? What type of care are the patients with pressure ulcers receiving on the wards? I also need to look at why the participants think that the situation regarding pressure ulcers is getting worse. What is the relationship between the grades of pressure ulcers seen and the value placed on pressure ulcer
prevention? This is something that needs to be explored further.

The attached memo highlights the researcher’s initial thoughts as the data from the participants was analysed. It also shows that some categories like the grade of pressure ulcers seen were near saturation, but other issues like why the grades of pressure ulcers seen had changed merited further investigation. This memo also shows how the researcher tried to open up the data to unearth the thoughts, meanings and ideas that lay within.
Appendix 24: Publications arising from this thesis

Samuriwo (2010a; 2010b)

Publication not enclosed for copyright reasons.