



2017

## Unavoidable Pressure Ulcers: An Ethnonursing Study

Catherine M. Clarey-Sanford  
*Loyola University Chicago*

Follow this and additional works at: [https://ecommons.luc.edu/luc\\_diss](https://ecommons.luc.edu/luc_diss)



Part of the [Nursing Commons](#)

---

### Recommended Citation

Clarey-Sanford, Catherine M., "Unavoidable Pressure Ulcers: An Ethnonursing Study" (2017).  
*Dissertations*. 2583.  
[https://ecommons.luc.edu/luc\\_diss/2583](https://ecommons.luc.edu/luc_diss/2583)

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact [ecommons@luc.edu](mailto:ecommons@luc.edu).



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](#).  
Copyright © 2016 Catherine M. Clarey-Sanford

LOYOLA UNIVERSITY CHICAGO

UNAVOIDABLE PRESSURE ULCERS: AN ETHNONURSING STUDY

A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE GRADUATE SCHOOL  
IN CANDIDACY FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

PROGRAM IN NURSING

BY

CATHERINE M. CLAREY-SANFORD

CHICAGO, ILLINOIS

MAY 2017

Copyright by Catherine M. Clarey-Sanford 2017  
All rights reserved.

## ACKNOWLEDGMENTS

Foremost, I would like to express my sincere gratitude to my dissertation chairperson, Dr. Lee Schmidt, for his continuous support and immense knowledge. His diligent guidance ensured that my study adhered to research standards and was written in a scholarly manner. When Dr. Schmidt informed me that I was ready to defend, I was confident in my success.

Besides my chairperson, I would like to thank the rest of my dissertation committee, Dr. Judith Jennrich and Dr. Frances Vlasses, for their encouragement, insightful comments, and their expertise in the ethnonursing methodology.

To my husband Mark, I am so thankful for his patience, motivation, and knowledge of grammar. His unwavering support during my doctoral studies and his willingness to proofread my papers has truly been inspirational.

I am tremendously thankful to my son Myles, who has never faltered in his “you can do it Momma” type attitude. I look forward to having more dedicated mother-to-son time.

I thank my fellow classmates, especially Dr. Sharon Jones and Dr. Laura Rogers, for their friendship and support. I will be forever grateful for their willingness to share their personal knowledge of the dissertation process.

To the Clarey and Seel families, I am so appreciative of your support, encouragement, love, and prayers.

Finally, a sincere thank you to my friends: Rita, Sue, Moses, Nancy, Julie, Beckie, Sue, Joni, Liz, Donna, and Stacey. Their steadfast belief in all my endeavors offered the much needed hope and fortitude for me to persevere.

In memory of my mom, Joan Patricia Clarey

## TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF TABLES	x
LIST OF FIGURES	xi
ABSTRACT	xii
CHAPTER ONE: PROBLEM STATEMENT	1
Quality of Care	2
Nursing Initiatives	2
Federal Initiatives	3
Unavoidable Pressure Ulcers	5
Quality Assessments	6
Purpose of the study	8
Summary	10
CHAPTER TWO: REVIEW OF THE LITERATURE	13
Pressure Ulcer Development	14
Theoretical Etiology	15
Prevention Interventions	16
Unavoidable Pressure Ulcers	17
Hemodynamic Instability	17
Impaired Perfusion	18
Skin failure	19
End stage and end-of-life conditions	19
Acute care conditions	20
Nonadherence to Prevention Interventions	21
Palliative care	22
Medical Device-related Pressure Ulcers	23
Nurse Staffing	25
Documentation	27
Culture of Safety	30
Methodological Questioning	34
Summary	37
CHAPTER THREE: METHODOLOGY	42
Research Design	42
Setting	43
Sample	43
Key Informants	44
General Informants	45
Sample Size	46
Recruitment of Participants: Key and General Informants	46

Data Collection	46
Research Enablers	48
Observation-Participant-Reflection (OPR) enabler	48
Stranger-to-trusted-friend enabler	49
Sunrise enabler	50
Personal Interviews	53
Data Management	53
Data Analysis	54
Trustworthiness	55
Ethical Considerations	55
Biases and Assumptions	55
Human Rights Considerations	57
Patients	57
Informants	58
Summary	58
CHAPTER FOUR: RESULTS	59
Sample	59
Recruitment	62
Data Collection	62
Enablers	63
Personal Interviews	65
Analysis	67
Findings	69
Universal Culture Care Theme I	71
Care pattern UIa: Completion of skin assessments was optional	71
Culture care influences	74
Priority setting practices	74
Care pattern UIb: The responsibility of skin assessments	76
Culture care influences	79
Kinship relationships	79
Universal Culture Care Theme II	80
Care pattern UII: Inability to implement pressure ulcer prevention interventions	80
Culture care influences	82
Economical staffing patterns	82
Diversity Theme I	85
Care pattern DIa: Documentation regimes	85
Culture care influences	86
Nurse's sense of accountability	86
Care pattern DIb: Gaps in documentation	87
Culture care influences	90
Lack of computerized charting	90
Diverse Theme II	92
Care pattern DII: Diverse multidisciplinary collaborative efforts	92
Culture care influences	95
Kinship relationships within silo social structures	95



Summary	97
Trustworthiness	98
Credibility	98
Confirmability	99
Meaning-in-Context	100
Recurrent Patterning	100
Saturation	101
Transferability	101
Summary	102
 CHAPTER FIVE: DISCUSSION	 103
Themes	103
Universal Theme I	104
Completion of skin assessments optional influenced by priority setting practices	104
The responsibility of skin assessments was placed upon kinship relationships	106
Summary of Universal Theme I	107
Universal Theme II	108
Economical staffing patterns	108
Summary of Universal Theme II	110
Diverse Theme I	110
Documentation regimes were influenced by the nurse's sense of accountability	111
Gaps in documentation were related to the lack of computerized charting	112
Summary of Diverse Theme I	114
Diverse Theme II	116
Silo social structures of the hospital system	116
Summary of Diverse Theme II	118
Unique Finding	119
Limitations	119
Strengths	120
Implications for Nursing Practice	120
Implications for Nursing Education	121
Implications for Nursing Administration	122
Recommendations for Future Research	124
Conclusion	124
 APPENDIX A: PERMISSION TO USE CELLULAR RESPONSE TO PRESSURE	 126
 APPENDIX B: PERMISSION TO USE FACTORS CONTRIBUTING TO THE DEVELOPMENT OF PRESSURE ULCERS	 128
 APPENDIX C: FLYER FOR RECRUITMENT OF PARTICIPANTS	 130
 APPENDIX D: PERMISSION FROM DR. EILEEN WILLITS, VP OF PATIENT CARE SERVICES & CHIEF NURSING OFFICER	 132
 APPENDIX E: PERMISSION TO USE LEININGER'S ENABLERS	 134

APPENDIX F: OPEN INQUIRY GUIDE	136
APPENDIX G: LETTERS OF APPROVAL	139
APPENDIX H: CONSENT TO PARTICIPATE IN RESEARCH	143
APPENDIX I: FLOOR PLAN OF MEDICAL-SURGICAL UNITS	147
APPENDIX J: POLICY FOR SKIN/WOUND ASSESSMENTS	149
APPENDIX K: SCREEN SHOT FROM THE ELECTRONIC MEDICAL RECORD (EMR) OF THE PATIENT PHYSICAL ASSESSMENT	151
APPENDIX L: SCREEN SHOT FROM THE ELECTRONIC MEDICAL RECORD (EMR) OF THE BRADEN	153
APPENDIX M: SCREEN SHOT FROM THE ELECTRONIC MEDICAL RECORD (EMR) OF THE BRADEN-RELATED BEST PRACTICE ADVISORY	155
APPENDIX N: PERMISSION TO USE SCREEN SHOTS FROM THE ELECTRONIC MEDICAL RECORD (EMB)	157
APPENDIX O: PROTOCOL FOR CATHETER-ASSOCIATED URINARY TRACT INFECTIONS	159
REFERENCE LIST	161
VITA	174

## LIST OF TABLES

Table 1. Key Informant Demographics with Location, Stage and Related Factors of the HAPU	60
Table 2. General Informant Demographics with Location, Stage and Related Factors of the HAPU	61
Table 3. Findings of the Culture Care Themes	97

## LIST OF FIGURES

Figure 1. Components of pressure ulcer formation	15
Figure 2. Factors contributing to the development of pressure ulcers	16
Figure 3. Leininger's stranger-to-trusted-friend enabler guide	50
Figure 4. Leininger's sunrise enabler to discover culture care	51
Figure 5. Predicted action and decision modes of culture care	52

## ABSTRACT

In an effort to improve patient safety and the quality of care in the acute care setting, there has been an increased focus on the prevention of adverse events believed to be avoidable. Hospital-acquired pressure ulcers (HAPU) have been listed as one of those adverse events, and hospitals are no longer reimbursed for related costs. However, there are patient conditions and clinical situations in which a pressure ulcer can be deemed unavoidable. In acute care, unavoidable means that the patient developed a pressure ulcer even though the provider had: evaluated the patient's pressure ulcer risk factors; defined and implemented interventions that were consistent with recognized standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate. Despite these guidelines, the implementation and documentation of pressure ulcer prevention has been inconsistent, making it difficult to identify a HAPU as unavoidable. There is a lack of research exploring the acute care nurses' perspective of implementing and documenting pressure ulcer prevention interventions.

Using an ethnographic qualitative method, information was collected through observation, informal conversations, interviews, and field notes. Data collection took place in a regional medical center located in the midwest of the United States over a seven month period and included 23 participants: 7 acute care medical-surgical nurses who had provided direct care to a patient who developed a HAPU and 16 multidisciplinary health care members who had knowledge of pressure ulcer prevention interventions and documentation.

A systematic, rigorous, and in-depth qualitative analysis was completed using the Leininger Data Analysis Guide. Four themes emerged from the data regarding the culture of care of adults experiencing a HAPU: incomplete skin assessments were influenced by priority setting and kinship relationships; an inability to implement pressure ulcer prevention interventions was influenced by economical staffing; diverse documentation regimes were influenced by care rationing practices and technical factors; and diverse multidisciplinary collaborative pressure ulcer prevention efforts were influenced by silo social structures. The findings of this study not only have implications for nursing practice, administration, and education, but are vitally important in the identification of a HAPU as avoidable or unavoidable.

## CHAPTER ONE

### PROBLEM STATEMENT

A hospital-acquired pressure ulcer is a significant patient safety challenge for acute care hospitals. The European Pressure Ulcer Advisory Panel (EPUAP) and the National Pressure Ulcer Advisory Panel (NPUAP), defined a pressure ulcer, also known as a bed sore, pressure sore, decubitus ulcer, or pressure injury, as a localized injury to the skin and underlying tissue caused by unrelieved pressure (EPUAP & NPUAP, 2009; NPUAP, 2016). The ulcer usually develops over a bony prominence, such as the elbow, heel, hip, shoulder, back, and back of the head. In 1992, the US Agency for Healthcare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research, published clinical practice guidelines to assist health care professionals in preventing pressure ulcers. However, despite these guidelines, Hill-Rom (2016) reported that of the 107,403 acute care patients surveyed in their International Pressure Ulcer Prevalence Survey, there were 9,780 patients with pressure ulcers and 3,605 of those ulcers were hospital-acquired. Although the current total monetary cost for pressure ulcer care is unknown, Brem et al. (2010) calculated that the costs associated with both treatment and secondary complications of a Stage IV hospital-acquired pressure ulcer average \$124,185 per hospital admission. Dealey, Posnett, and Walker (2012) reported that the cost for resources such as skin cleansers, dressings, and inpatient bed-day charges that are required to care for Stage III and Stage IV pressure ulcers range from \$14,240 to \$22,222. In addition, affected patients experience increased length of stay, increased pain and suffering, and diminished quality of life

as well as increased morbidity and mortality (AHRQ, 2011; Maklebust & Sieggreen, 2000).

Although research has shown that using the AHRQ guidelines can lead to a decreased incidence of pressure ulcers (Ayello & Lyder, 2008), no intervention strategy has been reported to reduce the incidence to zero (Thomas, 2003). However, pressure ulcers are commonly used as a quality indicator for nursing care because the prevention, early detection, and optimal treatments are essential activities that traditionally lie within the nursing domain. The Institute of Healthcare Improvement ([IHI], 2006) has identified pressure ulcer prevention as one of their primary goals in the “Save 5 million lives” campaign, and believes that there can be significant reductions in HAPU if nursing evidence-based best practices are implemented.

## **Quality of Care**

### **Nursing Initiatives**

During the 1990s, hospitals substituted minimally trained, unlicensed workers for registered nurses (RN), and asked these workers to provide direct patient care interventions that were previously the responsibility of the RN. Concerned about nurse staffing, patient safety, and quality care issues, the American Nurses’ Association ([ANA], 1995) launched the Safety and Quality Initiative to identify relationships between nursing care and patient outcomes. The ANA (1995) designed a Nursing Quality Report Card for Acute Care that was intended to capture nursing-sensitive quality indicators by using a three-tier model that would reflect the structure, process, and outcomes of nursing care. Preliminary studies indicated that when there are more RNs, patients experienced fewer complications, shorter lengths of stay, decreased mortality rates, and lower overall costs (ANA, 1995, 1996; Blegen & Vaughn, 1998). Blegen, Goode, and Reed (1998) reported that morbidity indicators for preventable conditions, such as pressure ulcers,



pneumonia, postoperative infections, and urinary tract infections, were inversely related to the availability and quality of nursing care, influenced by RN staff mix and total nursing care hours provided per patient. In 1997, the ANA established the National Database of Nursing Quality Indicators (NDNQI) so that data could be collected on indicators believed to be distinct and specific to nursing care quality, including hospital acquired pressure ulcers. However, the Wound, Ostomy, and Continence Nursing Society Board of Directors (2009) recognized that pressure ulcer prevention is complex and not exclusively in the nurse's control.

### **Federal Initiatives**

In an effort to improve patient safety in the acute care setting, there has been an increasing focus on the prevention of adverse events, as well as the costs associated with these events. Gottlober (2001) reported that the implementation of diagnostic-related groups (DRGs) in 1983 revolutionized the payment for hospital care by creating an inpatient prospective payment system (IPPS). Although hospitals received fixed payments for specific DRGs, the IPPS provided for higher reimbursement rates resulting from complications or changes in health status, including the development of adverse hospital-acquired conditions (Mattie & Webster, 2008). In 1988, the Health Care Financing Administration (HCFA) began releasing information to the public regarding hospital morbidity and mortality rates, and began to look at adverse patient occurrences and measures of quality (Reed, Blegen, & Goode, 1998). The Institute of Medicine ([IOM], 1999) continued to spotlight the significance of morbidity, mortality, and costs associated with adverse medical events by publishing reports that between 44,000 to 98,000 patients die per year in the United States from preventable errors, costing an additional \$4.5 billion to \$5.7 billion annually.

As a response to the IOM's publication and the increasing emphasis on improving patient care in hospitals, the National Quality Forum ([NQF], 2002) published a report identifying adverse events that are serious, largely preventable, and of concern to both the public and healthcare providers. The NQF (2002) identified 28 serious reportable events (SREs) classified under one of the six following categories: surgical, product or device, patient protection, care management, environment, or criminal. The SRE list included injuries caused by care management and errors that occur from failure to follow standard care or institutional practices and policies, rather than an individual's underlying disease. The NQF intended to establish a uniform definition of serious reportable events (SREs) and a reporting structure, not a list of SREs to be used as the basis for CMS reimbursement (Mattie & Webster, 2008). However, when drafting the Deficit Reduction Act of 2005 (DRA), Congress required the Secretary of Health and Human Services to select events from the NQF's list of SREs for exclusion from Medicare payment (Mattie & Webster, 2008).

In response to the patient safety movement, the need to decrease misaligned financial incentives from the DRGs, and to comply with the mandate in the DRA, the Centers for Medicare and Medicaid Services (CMS) created a new IPPS that prevented hospitals from getting reimbursed for additional costs of treating hospital-acquired conditions (HACs). On October 1, 2008, CMS (2007) implemented its nonpayment policy entitled Hospital-Acquired Conditions and Present on Admission Indicator Reporting, commonly referred to as its *never event* policy. HACs were defined as conditions not detected on admission that could reasonably have been prevented through evidence-based guidelines (Remington, 2011). Ten specific HACs were identified as reasonably preventable from the SRE list: foreign object retained after surgery,

air embolism, blood incompatibility, Stage III and IV pressure ulcers, falls and trauma, poor glycemic control, catheter-associated urinary tract infection, vascular catheter-associated infection, surgical site infection, and deep vein thrombosis. The claim by CMS that Stage III and IV pressure ulcers could be prevented implied that hospital-acquired pressure ulcers resulted from inadequate care (Stokowski, 2010). However, no amount of attention or skill on the part of the health care provider can prevent the occurrence of pressure ulcers in all patients (Langemo & Brown, 2006; Sibbald, Krasner, & Lutz, 2010; Thomas, 2003; Worley, 2007).

### **Unavoidable Pressure Ulcers**

The term unavoidable is defined by Merriam-Webster (n.d.) as an event bound to happen, inevitable, or inescapable. The NPUAP (2010) unanimously agreed that unavoidable pressure ulcers can occur in certain patient populations, and developed the following definition:

Unavoidable means that the individual developed a pressure ulcer even though the provider had evaluated the individual's clinical conditions and pressure ulcer risk factors; defined and implemented interventions that are consistent with individual needs, goals, and recognized standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate. (para. 3).

During a 2013 NPUAP consensus conference, it was agreed that there are clinical scenarios and comorbid conditions that may make pressure ulcer development unavoidable (Alvarez et al., 2016). However, there were no definitive clinical studies that enabled the determination of which pressure ulcers were unavoidable and the definition of unavoidable pressure ulcer remained specific to caregiver interventions and not related to the acuity of the patient's clinical condition or the nurse staffing mix (Alvarez et al., 2016).

In 2010, a panel of 24 international multidisciplinary professionals, all with expertise in pressure ulcer prevention and treatment, was asked by the NPUAP to establish a consensus on

whether there are individuals in whom unavoidable pressure ulcers may develop (Black et al., 2011). The panel did agree that unavoidable pressure ulcers may develop in patients who are hemodynamically unstable, terminally ill, have certain medical devices in place, or are nonadherent with artificial nutrition or repositioning. Although the panel recognized that adequate staff numbers and training are crucial components of pressure ulcer prevention, the effects of nursing staff to patient ratios and nurse staffing mix were not addressed by the panelists, and the NPUAP's original definition of an unavoidable pressure ulcer remained unchanged (Black et al., 2011). To operationalize the phenomenon, it is believed that an unavoidable pressure ulcer occurs when pressure cannot be relieved and perfusion cannot be improved as determined by the patient condition and situation. However, it is only through the nurse's implementation and the documentation of preventive interventions that a pressure ulcer can be deemed as unavoidable.

### **Quality Assessment**

Several care-related factors can influence pressure ulcer prevalence rates and can be divided into structural and process factors according to Donabedian's structure-process-outcome (SPO) model (Donabedian, 1986). The SPO model has been designed as a framework for quality assessment in which the influence of the health care system and the performances of practitioners are taken into account. The structure is described as the attributes of the care setting; the process is what is actually being done for prevention and treatment; and the outcome is referred to as the effects of the care on the patients' health status (Donabedian, 1986).

Meesterberends (2013), using the SPO model, identified specific factors related to pressure ulcers in acute care. The structural factors are defined as the setting in which pressure

ulcer prevention and treatment is provided. These include the following: the availability of pressure ulcer guidelines and pressure ulcer prevention and treatment material, as well as education of the staff and staffing levels (Meesterberends, 2013). In conjunction with structural factors, nursing-related preventive interventions (process) are also linked to the development of pressure ulcers. Nursing related preventive interventions include pressure ulcer risk assessment, skin inspection, nutritional screening, repositioning, and the use of support surfaces (Meesterberends, 2013). The outcome is referred to as the pressure ulcer prevalence rate. The prevalence of pressure ulcers can be defined as the number of persons with a pressure ulcer who exist in a patient population at a given point of time (Cuddigan, Ayello, Sussman, & Baranoski, 2001). It is believed that with an adequate application of pressure ulcer prevention interventions, pressure ulcer formation can be avoided (Lyder, 2003). Therefore, it is essential that the nursing staff have adequate knowledge about pressure ulcer preventive measures.

However, implementing and documenting pressure ulcer prevention interventions is a process that incorporates not only the nurses' knowledge of the risk factors, but also the value placed on prevention, the ability and opportunity to institute the interventions, and the ease or difficulty in complying with the recommended interventions (Titler & Everett, 2001). Although nurses have demonstrated a high level of knowledge regarding pressure ulcer development and prevention (Moore & Price, 2004), nurses have indicated that implementing and documenting prevention interventions are challenging due to environmental and clinical factors (Bostrum & Kenneth, 1992), as well as individual and organizational motivation (Maylor, 2001; Maylor & Torrance, 1999). To effectively facilitate the translation of evidence-based pressure ulcer prevention practices, the cultural environment in which the nurse practices must be understood.

**Purpose of the study.** The purpose of this ethnonursing study is to explore and understand pressure ulcer prevention practices from the perspectives of medical-surgical nurses. Although statistics have shown that, in the acute care setting, pressure ulcer prevalence is often higher in critical care units, the majority of hospitalized patients are admitted to medical-surgical units. The medical-surgical unit typically has higher admission rates and patient turnover, fewer nursing hours per day per patient, and less experienced nurses than in critical care (Dunton, Gajewski, Klaus, & Pierson, 2008). These factors have been suggested in the literature as influencing the development of pressure ulcers and implementation of pressure ulcer prevention measures, yet little attention has been focused in the literature on the medical-surgical unit or the nurse caring for patients in the medical-surgical unit (Amlung, Miller, & Bosley, 2001; Cuddigan, Ayello, Sussman, & Baranoski, 2001). One specific aim of this study is to explore the medical-surgical nurses' culture care beliefs, values, and practices related to pressure ulcer prevention practices to the patient with a HAPU. This exploration will assist in understanding factors that facilitate or inhibit consistent implementation and documentation of pressure ulcer prevention interventions.

Berlowitz et al. (2009) recognized that there are gaps between current best practices and actual work practices in the acute care hospital due to uneven access to current information, variation in staff knowledge, and lack of coordination of care. An organizational culture that promotes teamwork and communication, as well as individual expertise, is required to accomplish coordination of high-quality pressure ulcer prevention (Berlowitz et al., 2009). Consequently, there may be nurses who understand the importance of pressure ulcer prevention implementation and documentation, but there may be great variations across the organization in

the nurses' levels of knowledge and motivation. The extent and size of these gaps will not be known until current practice is examined.

The avoidability or unavailability of a pressure ulcer is tied to the presence or absence of consistent application of patient-centered plans for prevention. There must be clear evidence indicated in the nurse's documentation that the pressure ulcer occurred despite consistent implementation of evidence-based prevention interventions. This documentation should include any issues with patient or caregiver adherence to the prevention interventions, and if applicable, any prevention intervention that was contraindicated because of the patient's clinical condition (Jankowski & Nadzam, 2011). Because implementing and documenting pressure ulcer prevention requires prior knowledge and training by the acute care nurse, as well as a supportive organizational environment, Leininger's ethnonursing research method will be used to explore the emic and etic cultural meanings, expressions, and patterns of care related to the patient with a HAPU. The aim is to explore, among acute care medical-surgical nurses, the culture care beliefs, values, and practices regarding pressure ulcer prevention in the patient with a HAPU within the perceived culture of the hospital organization, specifically regarding the culture care beliefs, values, and practices surrounding pressure ulcer prevention in the high risk patient. Through analysis of the findings and with the use of Leininger's (2006a) theory of culture care universality and diversity, cultural care facilitators and barriers related to pressure ulcer prevention implementation and documentation will be understood.

Several broad research questions will guide this study:

1. What are the culture care beliefs, values, and practices of acute care medical-surgical nurses as they care for the patient with a HAPU?

2. What factors in the acute care medical-surgical unit culture facilitate nurses as they express their beliefs, values, and practices while caring for the patient with a HAPU? What factors are barriers in this same manner?
3. Is there evidence of Leininger's (2006a) modes of culture care preservation and/or maintenance, accommodation and/or negotiation, or repatterning and /or restructuring in the care provided by the acute care medical-surgical nurses to the patient with a HAPU?
4. How do acute care medical-surgical nurses describe any changes in their culture care beliefs, values, and practices over time, specifically regarding the care of the patient with a HAPU?

Leininger's theory includes the fundamental transcultural nursing principle that transcultural nursing theory, research, and practice is interested in both universals and differences to generate new knowledge and to provide beneficial humanistic and scientific care practices (Leininger, 2006a). This foundational principle highlights the importance of discovering similarities and differences underlying the culture care beliefs, values, and practices of acute care medical-surgical nurses as they care for the patient with a HAPU, as well as that of the hospital culture.

**Summary.** Pressure ulcers can have serious consequences. They cause a major burden in terms of patient suffering and can result in a decreased quality of life, increased morbidity and mortality rates, an increased need for intensive nursing and medical care, and as a consequence, an increased cost in healthcare. Chapter One included a review of the problem, hospital-acquired pressure ulcers, as it relates to quality care initiatives and the perception that pressure ulcers can be avoided. It was noted that the majority of quality outcome research has been focused on



variables associated with the Donabedian (1986, 2003) framework; however, the constructs of culture and care related to the unavoidable pressure ulcer phenomena in acute care have yet to be explored.

It is presumed that acute care medical-surgical nurses will have similar beliefs, values, and practices regarding the implementation of pressure ulcer prevention interventions of the high risk patient, as well as the documentation of those interventions. It is assumed that nurses working on a medical-surgical unit in acute care have experienced an enculturation process including value orientation, formal and informal education, peer interactions, and work experiences related to the care of patients identified as high risk for pressure ulcer formation. However, nurses also incorporate their own personal and professional cultural care beliefs and values, thus their care practices may differ considerably from one another. Nursing research is needed to explore the gap between what is known about pressure ulcer prevention and the translation of the knowledge into nursing practice. In Chapter Two, relevant literature guided by the recognition that unavoidable pressure ulcers may develop in patients who are hemodynamically unstable, terminally ill, have certain medical devices in place, or are nonadherent with artificial nutrition or repositioning (Black et al., 2011), will be reviewed.

In Chapter Three, the culture care beliefs, values, and practices of acute care medical surgical nurses as they care for the high risk pressure ulcer patient, using Leininger's ethnonursing research method, will be discussed. Leininger's Theory of Culture Care was chosen as the framework for this study for several reasons. The most important reason was that this theory focuses on care which is central to this study. Care and its meanings are considered the substance of nursing practice (Hubbert, 2006), and the need to identify care provided by nurses

to the patient who has a hospital acquired pressure ulcer in the acute care medical-surgical unit guided this investigator to the Culture Care Theory. Culture Care Theory, with the use of an ethn nursing research method, will provide a guide for bringing about culturally congruent care.

## CHAPTER TWO

### REVIEW OF THE LITERATURE

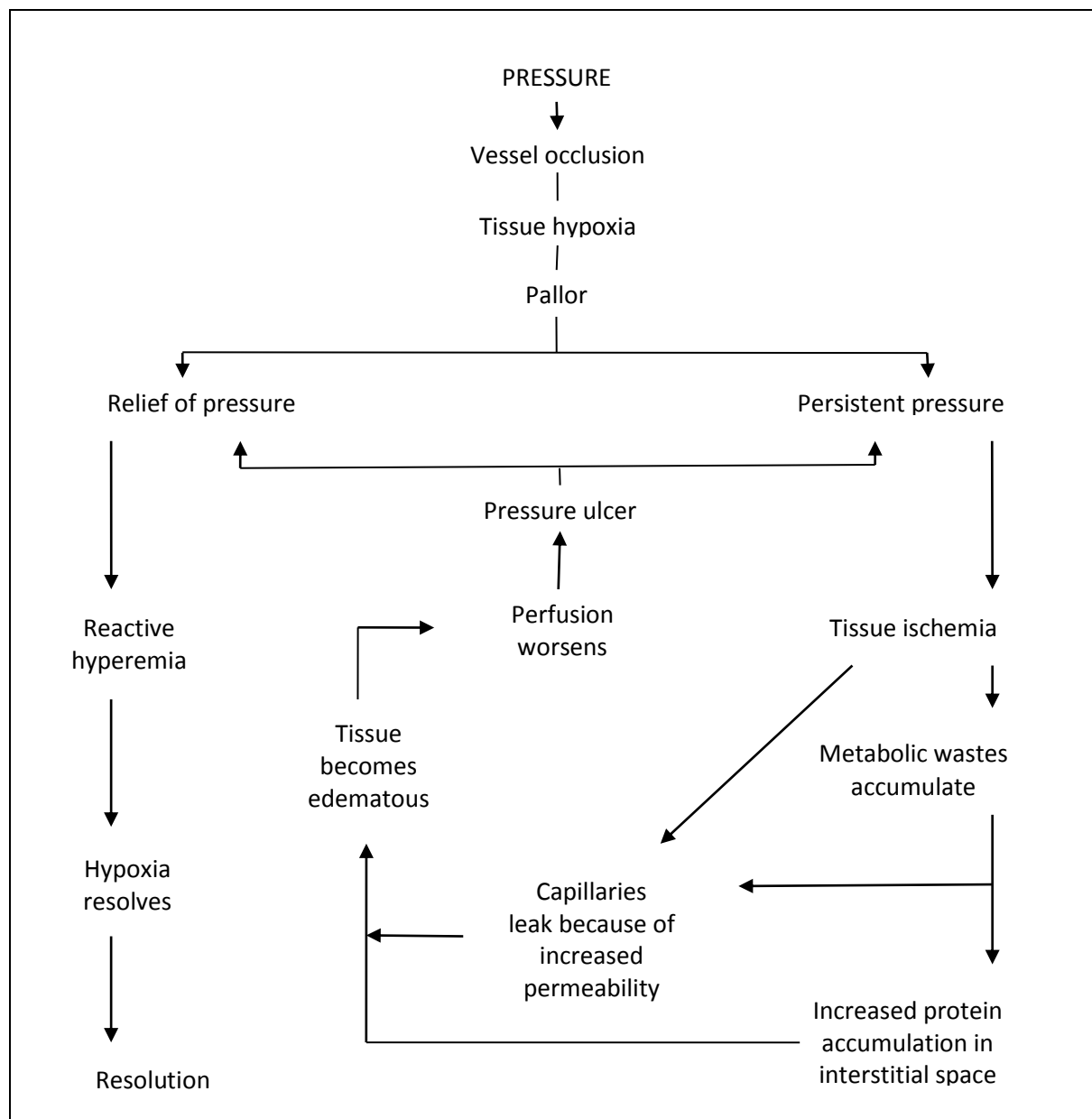
This chapter discusses key literature related to hospital-acquired pressure ulcers. Relevant studies describing quality of care, never events, pressure ulcer development, risk factors, and documentation were critiqued and gaps in knowledge identified. To identify sources of scientific knowledge related to the phenomenon of unavoidable pressure ulcers, electronic databases such as the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane, Medline, ProQuest, and PsychINFO were searched using a combination of the key words pressure ulcer, risk factors, quality care, never events, unavoidable, and documentation. There was no limitation to the time period for the search. To be included, papers had to be in English. Studies were selected that specifically addressed pressure ulcer risk factors, pathophysiology and mediating factors, and had pressure ulcer as an outcome measure. Relevant articles that addressed hemodynamic instability, impaired perfusion, nonadherence to preventions interventions, palliative care, medical devices, and nurse staffing were retrieved and their reference lists reviewed for additional articles. An extensive hand search was also conducted using sources identified from nursing wound care books, nursing and government websites, and references from seminal studies and articles. To date, no ethn nursing hospital acquired pressure ulcer studies have been published for review. Of significance, no studies reporting the nurses' perspectives of care associated with the unavoidable HAPU were published for review. The following is a review of the science related to the HAPU as it relates to the

unavoidable pressure ulcer phenomena.

### **Pressure Ulcer Development**

To fully understand the phenomenon of unavoidable pressure ulcers, one must first be aware of how pressure ulcers develop. Pressure ulcers are localized areas of skin injury that develop when underlying soft tissue is compressed without relief, usually found over a bony prominence (AHRQ, 1992; Bansal, Scott, Stewart, & Cockerell, 2005; Thomas, 2001). As pressure increases over these areas, blood flow is occluded, thereby depriving tissue of oxygen, nutrients, and lymph circulation. Tissue acidosis occurs, resulting in increased cellular permeability, edema, and eventually cell death (Pieper, 2000). Pressure is the major causative factor in pressure ulcer formation, and the intensity of pressure must be considered in tandem with the duration of pressure. There seems to be an inverse relationship between duration and intensity in that low-intensity pressures, over a long period of time, can cause tissue damage just as high-intensity pressure can over a shorter period of time (Brooks & Duncan, 1940; Kosiak, 1961; Trumble, 1930) (see Figure 1).

Figure 1. Components of pressure ulcer formation.



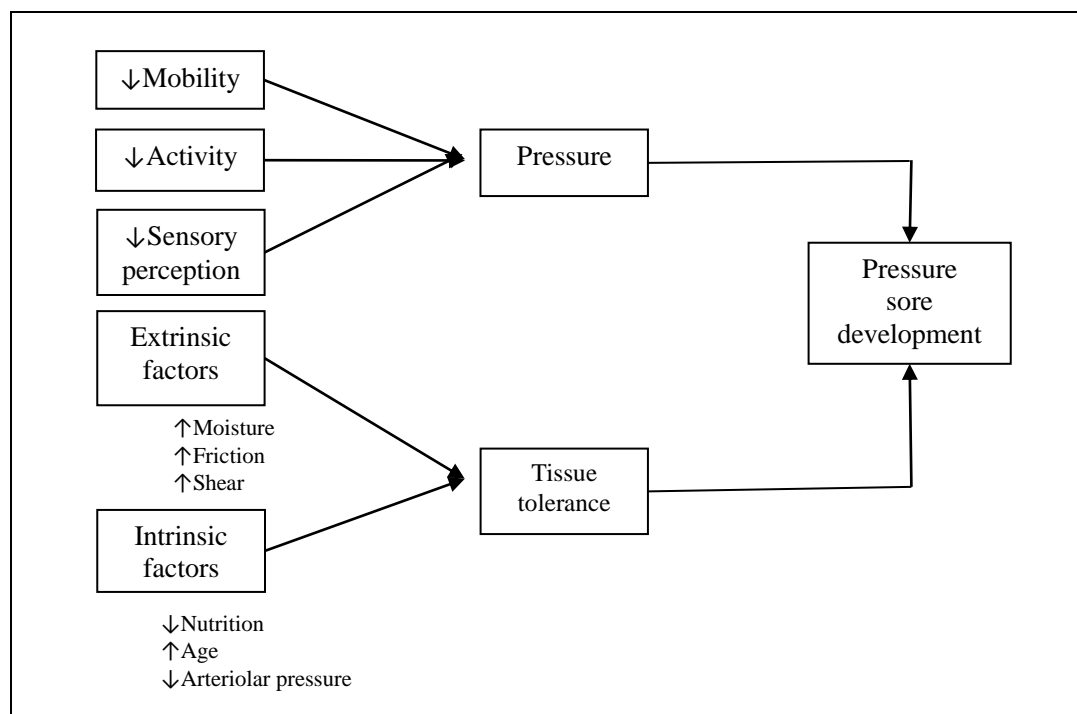
Note. Adapted from “Mechanical Forces: Pressure, Shear, and Friction,” by B. Pieper, in (2000) R.A. Bryant, (Ed.), 2000, *Acute & Chronic Wounds: Nursing Management*, p. 236. Reprinted with permission.

### Theoretical Etiology

Although pressure is the primary risk factor attributed to pressure ulcer formation, a number of contributing or confounding factors are associated with pressure ulcers (NPUAP,

2010). A theoretical framework developed by Braden and Bergstrom (1987) depicts pressure ulcer formation to include not only the basic concepts related to pressure, but extrinsic and intrinsic factors related to tissue tolerance (see Figure 2).

Figure 2. Factors contributing to the development of pressure ulcers.



*Note.* Extrinsic and extrinsic factors contribute to pressure ulcer formation. Adapted from “A Conceptual Schema for the Study of the Etiology of Pressure Sores,” by B. Braden and N. Bergstrom, 1997, *Rehabilitation Nursing*, 12(1), p. 8. Reprinted with permission.

## Prevention Interventions

It is believed that pressure ulcers are mostly preventable if nurses actively implement evidence-based practice for pressure ulcer prevention (Lyder, 2003). The first guidelines were developed by the AHRQ (1992) to provide clear recommendations for caregivers who assess and treat patients at risk for pressure ulcer development. Based on the AHRQ guideline, the NPUAP endorsed an evidence-based prevention protocol that included 5 elements: risk assessment with a valid instrument; frequent patient repositioning; managing nutrition, moisture, and incontinence;

using pressure reduction support surfaces; and continual nursing education about prevention (EPUAP & NPUAP, 2009). Documentation in the medical record should support that all of these components were implemented. Although there have been substantial improvements in pressure ulcer prevention practices, as well as increased regulatory and legal interventions, the hospital-acquired pressure ulcer incidence rate has remained at approximately 3.5% to 4.5% (Krapfl & Mackey, 2008; Lyder et al., 2012), with Hill-Rom (2016) reporting an international HAPU of 3.4% in the acute care setting.

### **Unavoidable Pressure Ulcers**

The ensuing review of the literature was organized according to the conditions and situations related to unavoidable pressure ulcer development that were identified by the NPUAP's expert panel: hemodynamic instability, impaired perfusion, nonadherence to prevention interventions, medical device-related pressure ulcers, and nurse staffing (Black et al., 2011).

#### **Hemodynamic Instability**

During critical illnesses, hypoperfusion states can deprive the skin of oxygen and nutrients, causing the skin to fail (Langemo & Brown, 2006; Sibbald, Krasner, & Lutz, 2010, Yastrub, 2010). Acute situations such as dehydration, hypoxia, hypotension, and anemia are related to hypoperfusion, and can result in decreased skin perfusion leading to tissue damage and death (Bansal, Scott, Stewart, & Cockerell, 2005; Benbow, 2007; Langemo & Brown, 2006; Levine, Humphrey, Lebovits, & Fogel, 2009; Sibbald, Krasner, & Lutz, 2010; Yastrub, 2010). A decrease in tissue perfusion and microcirculation diminishes the skin's ability to tolerate even a normal level of pressure or external insult, thereby placing these individuals at a higher risk for

pressure ulcer formation.

Hemodynamic instability has been identified as a risk factor for pressure ulcer formation and an obstacle to consistent turning and repositioning practices (NPUAP, 2010; Peerless, Davies, Klein, & Yu, 1999). Brindle et al. (2013) conducted a literature review of hemodynamic instability in conjunction with the terms turning and repositioning, and reported that a unit's practice culture and individual clinical perceptions regarding hemodynamic instability may lead to not turning patients out of fear of inducing bradycardia, tachycardia, systemic hypotension, hypoxemia, or hypoperfusion. A consensus panel acknowledged that an individual's underlying clinical status may not tolerate routine positioning and could result in fatal changes in heart rhythm, blood pressure, and hypoxia (Brindle, et al., 2013). Brindle et al. (2013) found that nurses usually will pass along in a shift report that a patient was too unstable to turn, but do not routinely document the specific unstable moment or a plan for future mobility. Without the documentation, it is difficult to determine if a HAPU in this patient population was truly unavoidable.

### **Impaired Perfusion**

The skin is the largest organ system of the body and is comprised of two distinct layers: the epidermis is the outer or surface layer and the dermis, anchored to the subcutaneous tissue, is the inner layer (Herlihy & Maebius, 2000). Although the skin is able to withstand a number of mechanical and chemical assaults, and is capable of self-regeneration (Wysocki, 2000), preserving skin integrity becomes a challenge when exposure to external harms such as pressure, moisture, friction, and shear are combined with intrinsic factors such as illness, aging, and lifestyle choices (Benbow, 2009).



**Skin failure.** Langemo and Brown (2006) believed that the coexistence of a significant disease and organ failure during the development of a pressure ulcer was the single most crucial factor in determining the avoidability of such an ulcer. Shanks, Kleinhelter, and Baker (2009), in a retrospective, descriptive study, used the definitions of acute, chronic, and end-stage skin failure by Langemo and Brown (2006) to separate patients who developed hospital-acquired pressure ulcers into two groups: skin failure or non-skin failure. Those included in the skin failure group (n=23) also had complete documentation of prevention strategies as outlined by the unavoidable pressure ulcer definition by the NPUAP (2010). Those excluded from the skin failure group (n=59) had incomplete documentation of prevention strategies. Although Shanks, Kleinhelter, and Baker (2009) did not report an a priori power analysis, a post hoc power analysis of 0.485 yielded an underpowered study (Burns, 2000). However, the proportion of skin failure patients having hypotensive episodes, defined as having a systolic of 90 or less for 1 hour or more, was significantly higher than non-skin failure patients, 43% and 17% respectively ( $p = .01$ ). A greater incidence of acute conditions for cardiac, 26% versus 3% ( $p < .01$ ), pulmonary, 57% versus 32% ( $p = .05$ ), and renal failure, 48% versus 17% ( $p = .01$ ), as well as chronic conditions for cardiac, 65% versus 29% ( $p < .01$ ) and pulmonary insufficiencies, 43% versus 5% ( $p < .01$ ) were reported, with the skin failure patients having the greater incidence in each. The researchers key observation was that patients identified as meeting the criteria for skin failure developed pressure ulcers despite documented prevention efforts. However, 59 patients with HAPU were excluded due to inadequate documentation.

**End stage and end-of-life conditions.** End stage skin failure is an event in which skin tissues die due to hypoperfusion concurrent with the end of life (Langemo & Brown, 2006). It is

believed that organ decompensation and failure in the final weeks of life can result in large and unusual presentations of skin failure as the body organs shut down. Available resources that can reconstitute the skin are impaired by catabolic states (Levine, Humphrey, Lebovits, & Fogel, 2009) or the shunting of blood away from the skin to vital organs at the end of life (Sibbald, Krasner, & Lutz, 2010; Yastrub, 2010). Langemo and Brown (2006) agreed that pressure ulcers in the terminally ill are not always preventable. They hypothesized that individuals in poor health have lower capillary closing pressures than the normal 25 to 30mm Hg found in healthy individuals, which shortens the time for tissue ischemia and necrosis to occur. The Skin Changes At Life's End (SCALE) expert panel (Sibbald et al., 2008) also concluded that the skin can become dysfunctional from decreased oxygenation, resulting in decreased tolerance to pressure. Sibbald, Krasner, and Lutz (2010) agreed that a patient experiencing SCALE has a decreased tolerance to external insults, such as pressure, making the prevention of skin breakdown clinically and logistically impossible. During the dying process, as numerous vital organs become compromised, physiologic breakdown of the skin may occur in spite of pressure ulcer prevention interventions, and are therefore unavoidable. However, without the documentation of the prevention interventions, unavoidability of a pressure ulcer cannot be determined.

**Acute care conditions.** In acute illness, an unavoidable pressure ulcer may develop due to a hypoperfusion state as manifested by hypotension (Langemo & Brown, 2006; Shanks, Kleinhelter, & Baker, 2009). Compton et al. (2008), in a prospective, three year, pressure ulcer risk factor study, reported that 121 of the 698 intensive care unit (ICU) patients developed pressure ulcers. A post hoc power analysis yielded a power level of 0.83, and was determined to be adequate to draw conclusions about the pressure ulcer patients. Compton et al. (2008) found

that the incidence of pressure ulcers was significantly higher in patients who required vasopressor therapy as opposed to those who did not, 74.4% versus 54.4% respectively ( $p < .001$ ). During the acute illness, subjective indications of hypoperfusion, such as edema, 63.6% versus 23.4% ( $p < .001$ ), mottled skin, 33.1% versus 8.3% ( $p < .001$ ), and cyanosis 45.5% versus 19.2% ( $p < .001$ ), were significantly higher in the pressure ulcer patients than the non-pressure ulcer patients (Compton et al., 2008).

In a retrospective chart review of 345 ICU patients from January 2010 through October 2010, Bly, Schallom, Sona, and Klinkenberg (2016) were also able to identify oxygenation and perfusion factors that increased a patient's risk for pressure ulcers. For oxygenation variables, having a central venous oxygen saturation less than 60% for 5 minutes ( $p = .002$ ), an oxygen saturation as shown by pulse oximeter  $< 90\%$  ( $p < .001$ ), and a low hemoglobin mean of 7.7 g/dl ( $p < .001$ ), were significantly associated with the development of pressure ulcers (Bly et al., 2016). Bly et al. (2016) reported that most of the perfusion variables were associated with the development of pressure ulcers, which included a mean arterial blood pressure  $< 60$  mmHg ( $p = .001$ ), a systolic blood pressure  $< 90$  mmHg ( $p < .001$ ), and the use of more than one vasopressor ( $p < .001$ ). It should be noted that central venous oxygen saturation, less than 60% for 5 minutes, was the only variable reported with a time frame. For the other variables, any onetime value that met the threshold during the ICU admission was recorded as a yes (Bly et al., 2016).

### **Nonadherence to Prevention Interventions**

The NPUAP recognized that nonadherence to pressure ulcer prevention interventions such as frequent turning and repositioning, as well as maintaining adequate nutrition, is an individual's right (Black et al., 2011). However, an individual must be considered cognitively

intact and lucid to refuse care (White & Fletcher, 1991). Thus, a confused individual cannot be nonadherent because they do not have the capacity to understand the potential outcome of their behavior (Black et al., 2011). Regardless of cognitive behavior, the issues of nonadherence have an impact on the ability of the nursing staff to offload tissue or improve nutrition. However, the management of the confused nonadherent individual has received very little attention from nurse researchers. Most of the nursing research of nonadherence of pressure ulcer prevention is related to palliative care.

**Palliative care.** An unavoidable pressure ulcer may develop due to irreversible decompensation of major organ systems at the end of life, as seen in patients in palliative or hospice care (Shanks, Kleinhelter, & Baker, 2009). Eisenberger and Zeleznik (2003) reported that many hospice patients had a single position of comfort because of pain, contractures, pathological fractures, or anasarca, which impeded pressure ulcer prevention interventions such as positioning off of bony prominences. Langemo, Black, and the NPUAP (2010) agreed that comfort is of primary importance in palliative care and may supersede repositioning and turning of individuals who are actively dying or have conditions causing them to have a single position of comfort. The panel also suggested that adequate nutrition and hydration may not be attainable when the individuals are unable or refuse to eat. For individuals requesting palliative care, the EPUAP and the NPUAP published new pressure ulcer guidelines stating that pressure redistribution practices, as well as nutrition and hydration maintenance, are to be provided in accordance with patients' wishes and tolerance (Langemo, Black, & the NPUAP, 2010).

The decision by the nurse to reposition a person in pain can be challenging because pain contribute to discomfort (Searle & McInerney, 2008). In a qualitative study, Searle and McInerney (2008)

asked 12 nurses which factors were important when deciding whether to turn or not turn a patient receiving pressure ulcer prevention, during the last 48 hours of life. The nurses desired to maintain the patient's dignity and promote their autonomy, but described difficulties with determining the frequency of repositioning patients at the end of life due to deteriorating physical symptoms, ensuring patient comfort, and conforming to the culture on the unit. Searle and McInerney (2008) reported that nurses' decisions to reposition the dying patient were based on personal and colleagues' knowledge and experiences, along with the requests by the patients and their caregivers.

Every patient has the right to refuse care, but when this happens, nurses are responsible for several tasks, including: documenting patient's refusal, trying to discover the basis for the patient's refusal, presenting a rationale for why the intervention is important, designing an alternative plan, offering alternatives, and documenting everything, including the patient's comprehension of all options presented (AHRQ, 2011). Any revised strategy needs to be described in the care plan and documented in the patient's medical record. Nurses must know and follow the standards of care established for their profession, as well as their facilities' policies and procedures. If there is a deviation from these guidelines without documentation and a HAPU develops, it can serve as evidence of negligence (Posthauser, 2006).

### **Medical Device-related Pressure Ulcers**

The majority of pressure ulcers occur over bony prominences such as the sacrum or heels, however, the NPUAP recognized that pressure ulcers can also occur on any tissue under pressure and thereby can develop beneath medical devices. The incidence of device-related pressure ulcers nationwide is unknown. However, Black et al. (2010) analyzed data that were

collected during eight quarterly pressure ulcer prevalence studies in Minnesota and found that 39 of the 113 hospital acquired pressure ulcers, 34.5%, were medical device related. It was also determined that if a patient had a medical device, they were 2.4 times more likely to develop a pressure ulcer of any type (Black et al., 2010). Nix (2011) analyzed data collected from October, 2008 to August, 2009 through Minnesota's mandatory statewide reporting system and found that 25% of hospital-acquired pressure ulcers Stage III, IV, and unstageable, were caused by medical devices. The types of devices associated with pressure ulcer formation were as follows: respiratory equipment like oxygen tubing, masks, and endotracheal tubes; nasogastric tubes; and orthotics such as splints and collars (Nix, 2011). The ulcers presented near or under the medical device and developed in the shape of the device.

Black et al. (2010) reported that medical device-related pressure ulcers are rarely discussed in the literature or tracked on most quality measures. Nix (2011) agreed that the risk of medical device-related pressure ulcers is not captured on any scale or tool, and reported that the ulcers are difficult to determine because they may not be associated with a bony prominence, may be mistaken for dried exudate buildup in the oral, nasal, or gastric mucosa, and may deteriorate rapidly due to moist environments and the lack of fatty tissue such as behind the ears, on the occiput, or on the bridge of the nose. Although the NPUAP Panel conceded that medical device-related pressure ulcers are not always avoidable, the measurement of this type of ulcer is just beginning to appear in the literature and further research is recommended (Black et al., 2011).

## **Nurse Staffing**

The NPUAP believes that pressure ulcer prevention begins with a complete pressure ulcer risk assessment which guides the nurse in developing a comprehensive plan of care, but if there is insufficient staffing to implement the prevention plan, avoidable pressure ulcers can develop (Black et al., 2011). However, specific staff-to-patient ratios or training programs were not discussed by the panelists (Black et al., 2011), and a nursing skill mix model that best achieves cost effectiveness and quality care has yet to be determined (Yang, Hung, Chen, Hu, & Shieh, 2012).

Loan, Jennings, Brosch, DePaul, & Hildreth (2003) conducted a study over 3 months to determine if nurse staffing mix had an effect on hospital-acquired pressure ulcers, falls, and bacteremias, but found it difficult to collect staffing data. The researchers were able to determine that the medical and surgical units were staffed with 50% registered nurses (RNs) and approximately 25% each for licensed practice nurses (LPNs), and nursing assistants (NAs); and that the intensive care units (ICU) were staffed with 75% RNs, with LPNs making up the remaining 25%. Loan et al. (2003) reported that 9 of the 872 study patients had a total of 11 pressure ulcers Stage II or higher. The higher percentage of hospital-acquired pressure ulcers, 27%, was in the intensive care unit, which also had the highest percentage of RNs. Loan et al. (2003) found that the hospital-acquired pressure ulcers were not related to the quality of care delivered, but were associated more with the acuity level of the patient, noting that the length of stay was almost twice as long for the patients who developed pressure ulcers, 13.5 days (SD = 8.55) as compared to patients who did not develop pressure ulcers, 7.8 days (SD = 7.73). There were only 3 documented injuries from falls, all occurring on the medical-surgical units, and only

one bacteremia, which occurred in the ICU. However, it was difficult for the researchers to determine direct nurse-to-patient care hours from nursing hours spent in administration, education, or meetings.

Yang, Hung, Chen, Hu, and Shieh (2012) examined data from 2006 to 2008 to determine the impact of nursing skill mix on patient outcomes. A total of 487 patients were categorized into two groups: 247 patients received a mixture of RN and nursing assistant care with RNs providing 70% to 80% of the care, and 240 patients received 100% of their care from an RN. Yang et al. (2012) reported no significant difference between the mixed group and the all RN group, reported respectively, in the occurrence of pressure ulcers, 1.21% to 2.92% ( $p = .19$ ), respiratory tract infections, 3.24% to 3.33% ( $p = .95$ ), days hospitalized,  $22.29 \pm 12.54$  to  $21.69 \pm 12.03$  ( $p = .59$ ), and mortality, 20.24% to 18.75% ( $p = .68$ ). However, other researchers have reported that patient outcomes such as mortality, pressure ulcers, and facility acquired infections increase when the number of patients for each nurse increases (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Kane, Shamliyan, Mueller, Duvall, & Wilt, 2007). There is a vast amount of published research data attempting to determine the relationship between patient outcomes and nurse staffing, but the results are conflicting.

The assumption that pressure ulcer prevalence rates can be used to indicate the quality of nursing care has not been reflected in the data. Bates-Jensen et al. (2003) collected data from 16 nursing homes to determine if the quality of nursing care provided in the homes with reported low-pressure ulcer prevalence (PUP) rates was better than the homes with high-PUP rates as recorded on the Minimum Data Set (MDS). Medical record data, direct human observation, interviews, and data from a wireless thigh movement monitor were used to determine if there



was a difference in the care provided. Of the 1,552 residents, 329 were determined to be at risk for pressure ulcers and 55 participants were identified as having a pressure ulcer, 13 in the low-PUP homes and 42 in the high-PUP homes. Participants in the high-PUP homes were observed on pressure-reduction surfaces more often than the low-PUP, with a mean of 68% (SD  $\pm$  33.1%) in the high-PUP and 52% (SD  $\pm$  38.7%) in the low-PUP home ( $p < .001$ ). There were no differences between low- and high-PUP homes in documentation of prevention interventions ( $p = .538$ ), length of time spent in the same position ( $p = .323$ ), or the average number of hours between repositioning with every 2 hours recorded for nearly every participant, 97% in low-PUP homes and 93% in high-PUP homes ( $p = .260$ ). Although the MDS quality indicator for pressure ulcers discriminated between the nursing homes with high and low numbers, no measurement of pressure ulcer care reported by Bates-Jensen et al. (2003) was better in the low-PUP homes, and the high-PUP homes performed better on measures related to the use of pressure ulcer-reduction surfaces. Bates-Jensen et al. (2003) related the higher proportion of PUP in the high-PUP homes to residents being at a higher risk for pressure ulcers. The best explanation for pressure ulcer development is that it reflects the severity of the patient's condition, not the quality of nursing care (Reed, Blegen, & Goode, 1998). However, without proper nursing documentation of the implementation of prevention interventions, identifying a HAPU as unavoidable cannot be established.

### **Documentation**

Based on the AHRQ guideline, there are 5 evidence-based areas of prevention interventions: risk assessment with a valid instrument; frequent patient repositioning; managing nutrition, moisture, and incontinence; using pressure reduction support surfaces; and continual

nursing education about prevention (EPUAP & NPUAP, 2009). Documentation in the medical record should support that all of these components were implemented. Although it is recognized that not all HAPUs are preventable, specifically in patients who are hemodynamically unstable, have impaired perfusion, refuse prevention interventions, or have a medical device that cannot be removed, a HAPU cannot be determined unavoidable unless there is proper implementation and documentation of the evidence-based prevention interventions.

Gunningberg, Lindholm, Carlsson, and Sjoden (2001) investigated RNs' and nursing assistants' knowledge and documentation of risk, prevention, and treatment of pressure ulcers for patients with hip fractures. Fifty-five records of patients with HAPUs were audited for the documentation of the following prevention strategies: pressure relief such as use of repositioning, use of cushions or mattress overlays, nutritional support such as food and fluid intake, hygiene and moisture control, and patient education. According to the documentation, the following strategies were performed at the following rates: repositioning 29%, use of cushions 40%, use of mattress overlays 13%, food and fluid intake 0%, hygiene and moisture control 0%, and patient education 0%. Gunningberg et al. (2001) concluded that staff knowledge and documentation of pressure ulcer prevention could be improved, and that the guidelines for prevention and treatment of pressure ulcers were not fully implemented in clinical practice.

Gunningberg, Fogel-Dahm, & Egrenberg (2009) compared the comprehensiveness and quality of nursing documentation of pressure ulcers before and after the implementation of an electronic health record (EHR) in hospital care. There were 59 paper-based records identified with notes on pressure ulcers from 2002 and 71 EHR, identified from 2006. Comprehensiveness of nursing documentation related to pressure ulcer prevention interventions included the use of

risk assessments, pressure-reducing beds, repositioning the patient while in bed, pressure-reducing chairs, and repositioning the patient while in a chair. Documentation of risk assessments was the single improved prevention intervention with the use of the EHR ( $p < 0.001$ ); however, only 36 of the 71 patients had risk assessments documented. Gunningberg, Fogel-Dahm, & Egrenberg (2009) also noted that only 20 of the 71 EHR had complete documentation which included the description of the pressure ulcer, planned and implemented nursing interventions, and recorded nursing outcomes. The researchers concluded that the lack of visible leadership, time required to acquire computer skills, and difficulties with computer systems were possible barriers to successful EHR documentation (Gunningberg, Fogel-Dahm, & Egrenberg, 2009). Bjorvell, Wredling, & Thorell-Ekstrand (2003) wanted to know how the hospital organization and environment influenced the RN's ability to document. Through focus group discussions with 20 RNs from three hospital units, Bjorvell, Wredling, & Thorell-Ekstrand (2003) reported that nurses were frustrated about constantly being interrupted when trying to document, and never having peace and quiet around them for reflection. They were disturbed by telephone calls, relatives of patients, physicians, nursing assistants, and other health professionals.

Bickford (2000) believed much of the work by nurses remains invisible, especially in the area of documentation about patient care activities and nursing observations. Using ethnography to define and describe the use of computer-based patient records, Bickford observed nursing documentation regimes in a 300 bed acute care hospital system and then interviewed 7 registered nurses. By having first completed observation sessions in the various nursing care areas of the facility, the researcher better appreciated the nurse participants' answers as they expressed their concerns and frustrations about nursing practice and information management in today's

healthcare environment. Bickford (2000) reported that computerized charting had only bits and pieces of the nurse-patient experience since the sparsely documented details in the patient's medical record did not match the rich description of stories shared during verbal reports. Furthermore, the nurses envisioned that computerized charting would support clinical practice through clinical treatment and practice recommendations, on-line policies, procedures, clinical guidelines, and critical pathways; but most units did not have access to an information specialist and many computer resources remained unused (Bickford, 2000).

### **Culture of Safety**

Hospital-acquired pressure ulcers are commonly used as an indicator for the level of nursing care quality because of their considerable knowledge about risk factors and prevention interventions (Institute for Healthcare Improvement, 2006). However, to accomplish high-quality pressure ulcer prevention implementation and documentation in the acute care setting, an organizational culture that promotes team work and communication, as well as individual expertise, is required (AHRQ, 2011).

Vaismoradi, Bondas, Salsali, Jasper, and Turunen (2014) believed that a health-care system's success in improving patient safety depended upon nursing leadership. In a qualitative study, 16 nurses and 4 nurse managers in acute care were observed and interviewed in order to understand how nurse leaders facilitate safe patient care. Vaismoradi et al. (2014) determined that nurse leaders facilitate safe care by providing a safe environment, such as having sufficient staff and proper equipment. In order to facilitate the provision of safe care, nurse leaders were expected to strengthen and emphasize interdependency, cooperation, and integration between health-care providers, invite their collaboration, and remove communication difficulties between

nurses and other colleagues (Vaismoradi et al., 2014). Also important was the creation of a positive and open atmosphere. This was accomplished when nurse leaders demonstrated proper managerial skills to run the unit, defended and supported staff, rewarded nurses for best nursing practice, and provided an open culture for reporting and rectifying errors.

Ahroni (2014) reported on a process that was used in a large Veterans Affairs (VA) facility to unite a group of diverse wound care specialists with the goal of developing a wound and skin care program. The Program Development Cycle was the theoretical model used by the VA facility which consisted of 4 phases: (a) identifying the agency culture; (b) engaging in targeted project development; (c) developing operational strategies; and (d) conducting follow-up analysis.

Priorities in phase one included the identification of the facility's organizational culture, vision, values, mandates, resources, local dynamics, collaborators, and competitors (Ahroni, 2014). It was determined that because of the considerable variation in cultural norms from unit-to-unit, the VA system developed a culture that expected individuals and groups to routinely use evidence-based practice in their decision making. The WOCN's clinical practice guidelines for prevention and management of pressure ulcers were used to standardize care, and designated wound care champions were assigned to each unit. The wound care champions were volunteer RNs interested in providing pressure ulcer preventative care, were trained by the WOCN experts, and therefore, were able to provide on-the-spot staff education (Ahroni, 2014).

Targeted projects such as writing new policies, developing skin care bundles, and providing educational wound classes were completed in phase two. The skin care bundles included: the use of pressure ulcer risk assessment; the use of support surface algorithms; and

recommendations concerning the implementation of turning and repositioning regimes, incontinence management programs, and nutritional supplements (Ahroni, 2014). A standardized wound care template was developed to improve wound documentation, but this did not include the documentation of pressure ulcer prevention care.

During phase three, teamwork was the primary operational strategy. Results of quarterly pressure ulcer prevalence studies were used to promote positive peer pressure from unit-to-unit; for example, a unit with no HAPUs shared how they had developed informal turning teams on the night shift so the at-risk patients were regularly turned (Ahroni, 2014). The changes in practice resulted in nurses on the units taking ownership of their own practice.

Phase four, the analysis of the program, continues to be an on-going process. Ahroni (2014) did not report the overall pressure ulcer prevalence rate but stated the changes in culture, attitudes, and practices combined to reduce the incidence of facility-acquired pressure ulcers by raising awareness of pressure ulcer prevention. There was no mention of pressure ulcer prevention documentation, but the wound care template for documentation was consistently used (Ahroni, 2014).

Armour-Burton, Fields, Outlaw, and Deleon (2013) developed a Healthy Skin Project with the intention of decreasing the prevalence of HAPU in their surgical progressive care unit. The project consisted of 3 components: a unit-based wound liaison nurse, staff education, and the involvement of nursing assistants in the prevention of HAPUs. Armour-Burton et al. (2013) reported the prevalence of HAPUs from spring 2003 through summer 2006 ranged from 0.0% to 18.92%, with a mean of 4.85%. After implementation of the project, the prevalence of HAPUs decreased to 0.0% for 17 of 20 quarters. For quarters 1 and 2 of 2008, and quarter 2 of 2011, the

prevalence rates were 2.50%, 3.33%, and 2.94% respectively. The researchers concluded that a multidisciplinary approach to pressure ulcer prevention was effective in reducing the occurrence of HAPUs (Armour-Burton et al., 2013). There was no mention of prevention intervention documentation.

Although there were not specific research studies related to the unavoidable HAPU phenomena, Rogers (2013) was interested in understanding a similarly identified nurse-sensitive quality indicator, inpatient falls. Using Leininger's (2001) ethnonursing research method, Rogers (2013) examined the culture care meanings, expressions, and patterns associated within the adult inpatient fall phenomenon. Rogers (2013) identified three themes based upon recurrent, observed, and expressed commonalities and differences among the data collected from adult inpatients that fell during their hospital stay, as well as nursing staff that had direct knowledge about the inpatient fall event. The themes were as follows:

1. Culture care of adults experiencing a fall while hospitalized included blaming, motivated by self care despite their vulnerability during illness in order to maintain health and wellbeing and was influenced by cultural lifeways, philosophical factors and kinship/social factors.
2. Culture care of adults experiencing a fall while hospitalized involved mitigating risk in order to promote health and wellbeing and was influenced by educational and technological factors, and environmental context.
3. The Diverse Theme: Culture care of adults experiencing a fall while hospitalized meant experiencing diversity in the efficacy of staffing patterns and was influenced by economic factors, kinship/social factors and political/legal factors. (Rogers, 2013, p.

124).

Based on the study, Rogers (2013) identified ten culturally congruent implications for change in nursing practice, nursing education, and nursing administration. Rogers (2013) concluded that understanding the culture care themes related to adult inpatient falls has advanced the practice of nurse-sensitive quality care.

### **Methodological Questioning**

Nursing has been identified as a subculture within the health care culture, or as having attributes of a culture (Leininger, 2001; Leininger & McFarland, 2002, 2006). Cultural aspects of nursing have been identified as pertinent in influencing and improving care practices and imparting care meanings (Leininger, 2001; Leininger & McFarland, 2002, 2006). Knowledge of the meanings within the subculture is essential to understanding the full meaning of care from the care giver and care receiver perspectives (Leininger, 2001, 2006a). The understanding of the medical-surgical nurses' beliefs, values, and practices for pressure ulcer prevention implementation and documentation is expected to be important in providing new insights on how to create a culture of safety.

Ethnonursing is a qualitative research method that focuses on naturalistic open discovery of the informant's world. The ethnonursing method includes strategies to examine both emic and etic perspectives of a particular area of interest to nursing (Leininger, 2001, 2006a). These two anthropological concepts are defined by Leininger (2006a): "the term *emic* refers to local, indigenous or insider's cultural knowledge and view of specific phenomena; whereas *etic* refers to the outsider's or stranger's views and often health professional views and institutional knowledge of phenomena" (pp. 13–14). By using the ethnonursing research method, the



researcher will discover the meaning, expressions, and patterns of cultural care from the views and values of the insiders, the acute care medical-surgical nurses who care for a patient with a HAPU, also known as the emic perspective. The emic perspective will then be compared to the more universal views and values from the outsiders, the acute care medical-surgical nurses who have not cared for a patient with a HAPU, known as the etic perspective. By comparing emic and etic perspectives, universal and diverse care meanings, expressions, and patterns will be discovered

Ethnonursing requires that the researcher utilize specific enablers (Leininger, 2006b) in order to gain access to, and learn from, the people. The process of learning from the people is accomplished by direct personal involvement of the researcher in the community. The researcher's involvement leads to a trusting relationship between the researcher and informants. By focusing on learning directly from the people, the ethnonursing method has proven to be an excellent method for studying unique populations, groups, and cultures (Leininger, 2001, 2006a). One specific aim of this study is to explore the culture care beliefs, values, and practices of the medical-surgical nurses who have cared for a patient with a HAPU. This exploration will assist in understanding factors that facilitate or inhibit consistent implementation and documentation of pressure ulcer prevention interventions.

The ethnonurse-researcher, as a coparticipant with informants, will be able to obtain detailed accounts of cultural care situations, events, and happenings through direct observations, participation, and interviews over time. This ethnonurse-researcher will incorporate the following six assumptive premises, derived for the Culture Care Theory (Leininger, 2001, 2006a, 2006b), to support the purpose and conceptualization of this study. These assumptions serve as a

guide for the discovery of culture care beliefs, values, and practices of acute care medical-surgical nurses as they care for the patient with a HAPU:

1. Culture care for the adult medical-surgical patient is focused on health and wellbeing. It is assumed that nurses are completing pressure ulcer risk assessments and documenting pressure ulcer prevention interventions.
2. Culture care beliefs, values, and practices of the high risk pressure ulcer patient can be identified within the acute care medical-surgical setting and reflect diversities (differences) and commonalities (universalities). It is assumed that the documented pressure ulcer prevention plan of care for each patient is unique and dynamic.
3. Culture care of the adult acute care medical-surgical patient experiencing a HAPU is influenced by social structure factors such as language, philosophy of life, kinship, politics, economics, education, technology, and the environmental context. It is assumed that the action or inaction of a nurse is influenced by past and present experiences.
4. Culturally congruent and beneficial nursing care of the acute care medical-surgical patient can only occur when the culture care beliefs, values, and practices are known and explicitly used for appropriate, safe, and meaningful care. It is assumed that the acute organization has protocols that support evidence-based pressure ulcer prevention.
5. The three modes of culture care action are essential to the care of the high risk pressure ulcer patient who has developed a HAPU. It is assumed that the nurse will document decisions related to culture care preservation, accommodation, or repatterning.
6. The ethnonursing research method provides an important means to accurately discover and interpret humanistic and scientific dimensions of care related to the phenomenon of

unavoidable pressure ulcers. It is assumed acute care medical-surgical nurses who have cared for a patient with a HAPU will be willing to share their personal beliefs, values, and practices.

### **Summary**

Preventing HAPUs has become a health care priority, especially since CMS (2007) ceased to provide payment for certain hospital-acquired conditions including full-thickness pressure ulcers. Although HAPUs are now generally considered a nursing indicator for quality care, it has been determined that not all pressure ulcers are avoidable. A panel of experts agreed that an unavoidable pressure ulcer may develop in patients who are hemodynamically unstable, terminally ill, have certain medical devices in place, and are nonadherent with artificial nutrition or repositioning (Black et al., 2011). However, the unavoidability of a pressure ulcer is tied to the presence or absence of consistent applications of patient-centered plans for prevention. To be classified as an unavoidable pressure ulcer there should be clear documented evidence that the ulcer occurred despite consistent application of all evidence-based prevention strategies (Jankowski & Nadzam, 2011). Documentation should also include any refusal with the patient's or family's adherence to the prevention program, or if any interventions designed to prevent the ulcer were contraindicated because of the patient's clinical condition (Jankowski & Nadzam, 2011).

Without documentation, it is difficult to determine if a HAPU is avoidable or unavoidable. Hemodynamic instability was identified as an obstacle to consistent turning and repositioning practices (NPUAP, 2010; Peerless, Davies, Klein, & Yu, 1999). However, Brindle et al. (2013) found that nurses do not routinely document the instability of the patient or a plan

for repositioning. Shanks, Kleinhelter, and Baker (2009) separated HAPU patients into two groups, skin failure or non-skin failure, based on completed documentation of pressure ulcer prevention interventions. Of the 82 patients with HAPUs, 72% (n=59) had incomplete documentation (Shanks, Kleinhelter, & Baker, 2009). It was recognized that patients have the right to refuse care (Black et al., 2011), but nurses are responsible for documenting the patient's refusal, the basis for the refusal, the rationale for why the intervention was important, an alternative plan, the offering of alternatives, and the patient's comprehension of all options presented (AHRQ, 2011). No research study related to the documentation of the patient's refusal of pressure ulcer prevention interventions was found in the literature review. Although Black et al. (2011) identified that medical device-related pressure ulcers are not always avoidable, this type of ulcer is just beginning to appear in the literature.

Pressure ulcer prevention requires interdisciplinary team effort and organizational support, but nurses are central to this effort as they provide direct 24-hour patient care, including skin and pressure ulcer risk assessment and prevention interventions. Unfortunately, studies examining the relationship between nurse staffing and quality care indicators have contradictory findings (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Bates-Jensen et al., 2003; Loan, Jennings, Brosch, DePaul, & Hildreth, 2003; Yang, Hung, Chen, Hu, & Shieh, 2012). Black et al. (2011) acknowledged that adequate staffing is needed to carry out a plan of care to prevent pressure ulcers, but the appropriate nurse mix and staffing levels necessary for the delivery of quality care is unknown.

Nursing documentation provides evidence that patient care is meeting quality and safety standards set by regulators. However, Brooks (1998) identified heavy patient loads, insufficient

staffing, cumbersome charting formats, and lack of time as barriers to nurse documentation. Frank-Stromborg, Christensen, and Elmhurst (2001) found that some nurses regard some aspects of nursing care as so fundamental that they feel no need to document the provision of that care. The assumption that so-called fundamental care, such as repositioning a patient or applying moisturizer to the skin, is too routine to record can potentially expose nurses to accusations of unsafe patient care (Frank-Stromborg, Christensen, and Elmhurst, 2001). Bickford (2000) reported that computerized charting lacks the descriptive patient stories that are shared between nurses during verbal reports, and that without a unit champion, documentation resources are unused. Regardless of the cause, without the documentation of evidence-based pressure ulcer prevention interventions, a HAPU cannot be determined as unavoidable.

A supportive organizational culture and nursing expertise is needed to accomplish pressure ulcer prevention and proper documentation (Ahroni, 2014; AHRQ, 2011; Armour-Burton, Fields, Outlaw, & Deleon, 2013; Vaismoradi, Bondas, Salsali, Jasper, & Turunen, 2014). Pepler et al. (2005) did a multiple-case study and offered insight into the role of the organization in shaping nursing care on acute care units. They discovered that research utilization varied from unit to unit, but unit culture emerged as the principal factor linked to research use. In their study, the observed characteristics of culture were clustered into six categories: (a) structural factors such as staff stability and unit communication patterns; (b) decision making practices that reflect the nurses' body of knowledge and the unit-based resources; (c) characteristics of the nurses both individually and as a unit, including factors such as motivation and personal skills; (d) ongoing research on the unit; (e) the leaders' and nurses' understanding of research utilization and its value; and (f) efforts to create or support learning opportunities, encourage critical inquiry, and

conduct research (Pepler et al., 2005). Nursing judgment is influenced by the context in which the situation occurs and the culture of the nursing unit (Ahroni, 2014; Armour-Burton et al., 2013; Vaismoradi et al., 2014).

Although the importance of organizational and unit culture as it relates to pressure ulcer prevention is beginning to be presented in the literature, there is a lack of research as it pertains to the determination of a HAPU as unavoidable. The following gaps in the literature have been identified: (a) limited studies regarding the unavoidability of a HAPU; (b) limited qualitative studies examining the nurse's perspective of an unavoidable HAPU; and (c) limited studies guided by an appropriate theoretical framework for understanding the unavoidable pressure ulcer phenomena. Rogers (2013) identified similar gaps in the literature as it pertained to a different nurse-sensitive quality indicator and was able to use an ethnonursing research method to understand the phenomena of adult inpatient falls. By using the ethnonursing method, Rogers (2013) was able to understand the culture care themes related to adult inpatients falls and offered recommendations that contributed to the body of nursing knowledge. Knowing that inpatient falls and HAPU have both been identified as nurse sensitive quality indicators (CMS, 2007; NQF, 2002), the ethnonursing research method will be used to understand the acute care nurses' culture care beliefs, values, and practices related to the medical-surgical patient with a HAPU. Such an understanding will assist in addressing the complex issues of implementing, documenting, and improving evidence-based pressure ulcer preventative care.

It has been acknowledged that there are patient situations in which unavoidable pressure ulcers will occur, but to be deemed so there must be a record of evidence-based pressure ulcer prevention implementation, evaluation, and revision (Dealey et al., 2012). For translation of

evidence into practice to take place, nurses must know, understand, and value the evidence if they are to consistently apply the evidence into practice (Titler & Everett, 2001). To effectively understand the translation of evidence-based pressure ulcer prevention into practice and the documentation of that practice by the nurse, Leininger's (2006a, 2006b) ethnonursing research method will be used to explore previously unknown knowledge about the nurses' culture care beliefs, values, and practices associated with the care of a patient with a HAPU. Such an understanding will assist in addressing the complex issues of implementing, documenting, and improving evidence-based care, and the identification of a HAPU as avoidable or unavoidable.

## CHAPTER THREE

### METHODOLOGY

The focus of a study, also known as the domain of inquiry (DOI), allows for purposeful guided inquiry into cultural lifeways and unknown health patterns and practices (Leininger, 2006a). The following DOI statement was developed by the researcher to aid in the discovery of relevant data: What are the culture care beliefs, values, and practices of the acute care medical-surgical nurse caring for the patient who develops a HAPU? To explore the phenomenon unavoidable pressure ulcers, there was a particular interest in how the medical-surgical nurses implemented and documented their care. In this chapter, methods used to conduct the study are outlined. The specific elements to be addressed are: Research design; setting and sample; recruitment of participants; data collection, management, and analysis; rigor; and ethical considerations.

#### **Research Design**

A naturalistic, qualitative research design, specifically Leininger's (2001, 2006a, 2006b) ethn nursing method, was used to explore the phenomenon of unavoidable pressure ulcers. The goal in a qualitative design is to develop a rich understanding of a phenomenon as it exists and as it is construed by individuals within their own context (Polit & Beck, 2010, p. 260). This type of research design frequently involves collection of data in natural settings where the people whose experiences are of interest are located, and where they feel most comfortable.

The data, therefore, represent each research participant's subjective response, viewpoint,



thoughts, and feelings (Fawcett and Garity, 2009). According to Fawcett and Garity (2009), researchers who use qualitative research designs are regarded as the research instrument for data collection because they ask questions to each participant and analyze answers in an attempt to identify the meaning of the phenomenon being studied. The ethn nursing design focuses on open discovery performed in a naturalistic setting and is intended to record, explain, clarify and understand the participants' views, values and experiences as these impact nursing phenomena (Leininger & McFarland, 2006).

### **Setting**

The location of this study was a public, non for profit, regional medical center located in the midwest of the United States. The medical center has 285 licensed beds that included 4 units from medical-surgical patients: Cardiac telemetry, medical oncology, orthopedic-neurology, and post-surgical. According to the NDNQI (2015), the data collected in June, July, and August of 2015, revealed that each unit reported an average HAPU rate of 4.35%, 4.35%, 8.33%, and 0% respectively. It was noted that during that same time period, the post-surgical unit was sharing beds with the progressive care unit due to resurfacing of the post-surgical unit's floors. The progressive care unit had an average HAPU rate of 10.0% (NDNQI, 2015). It is unknown how many of the HAPUs were unavoidable.

### **Sample**

Leininger (2006a, 2006b) used the terms "key informant" and "general informant" to describe the participants who provide cultural knowledge to the researcher during a study. Key informants were intimately knowledgeable about the DOI, and general informants were not as closely connected to the DOI, but had general knowledge of the event.

## Key Informants

The key informants in this study were acute care medical-surgical nurses who provided direct care to patients who had developed a HAPU. The key informant inclusion criteria were as follows: (a) a medical-surgical RN; (b) English speaking and reading; (c) able to give consent; and (d) provided direct care to a patient who developed a HAPU within the last 30 days. Each key informant volunteered for only one interview.

Each key informant confirmed that they had the knowledge to perform a head-to-toe skin assessment, and had the ability to identify as well as stage a pressure ulcer according to the NPUAP (2007) pressure ulcer staging system, described as follows:

**Stage I Pressure Ulcer** appears to be intact skin with a non-blanchable redness over a localized area, usually over a bony prominence. Darkly pigmented skin may not have visible blanching, but the color may differ from the surrounding area.

**Stage II Pressure Ulcer** is a partial thickness wound in which there is a loss of the dermis. The ulcer is shallow with a red to pink wound bed, without slough. It may also present as an intact or open/ruptured serum-filled blister.

**Stage III Pressure Ulcer** is a full thickness wound in which subcutaneous fat may be visible but bone, tendon, or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss.

**Stage IV Pressure Ulcer** is a full thickness wound with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed.

**Unstageable pressure ulcer** is a full thickness wound in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

**Suspected deep-tissue injury (SDTI)** appears as a purple or maroon localized area of discolored intact skin. It may also appear as a blood-filled blister. The area of injury may be painful, firm, mushy, boggy, warmer or cooler as compared to adjacent skin.

It should be noted that as of April 2016, the NPUAP renamed pressure *ulcers* as pressure *injuries*, changed staging from Roman numerals to Arabic numerals, and updated the staging

definitions, described as follows:

**Stage 1 Pressure Injury** appears as non-blanchable erythema of intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin. The presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes of the skin do not include purple or maroon discoloration as these may indicate deep tissue pressure injury.

**Stage 2 Pressure Injury** appears as a partial-thickness skin loss with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present.

**Stage 3 Pressure Injury** appears as a full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible.

**Stage 4 Pressure Injury** appears as a full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible.

**Unstageable Pressure Injury** is a full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar.

**Deep Tissue Pressure Injury** appears as intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister.

However, this research study was completed before the April 2016 NPUAP Staging Consensus Conference, and thus the 2007 NPUAP definitions and terminology guided this study.

### **General Informants**

The general informants in this study were acute care medical-surgical care providers assigned to the same acute care medical-surgical units as the key informants. However, the general informants came from differing professions or nursing roles than the key informants, and included: a physician, nursing assistants, a respiratory therapist, a physical therapist, a dietician, nurse managers, and nurse educators. The inclusion criteria was as follows: (a) English speaking

and reading; (b) able to give consent; and (c) provided care on a medical-surgical unit. Each general informant volunteered for only one interview.

### **Sample Size**

The DOI associated with this study was: What are the culture care beliefs, values, and practices of the acute care medical-surgical nurse caring for the patient who develops a HAPU? Because the DOI was narrowly focused, this study was defined as a mini ethn nursing study (Leininger, 2006a). According to Leininger (2006a), a mini ethn nursing study requires a minimum of 6 key informants and 12 general informants based on a ratio of 1:2. Mini ethn nursing studies have yielded valuable nursing knowledge and are appropriate to study a specific and limited DOI (McFarland & Zehnder, 2006; Wehbe-Alamah, 2006). During this study, 7 key informants and 16 general informants were included to ensure that saturation was reached, and no new information emerged.

### **Recruitment of Participants: Key and General Informants**

Key and general informant recruitment came from direct self-referrals to the researcher through email or phone communication, as directed on the flyer that was posted on each medical-surgical unit and as seen in Appendix C. Nurse Managers on each unit also encouraged RN participation. General informant recruitment came from recommendations and referrals from the key informants and nurse managers. There was an incentive to participate given to each key and general informant in the form of a ten dollar gift card. Informants meeting the selection criteria were contacted by the researcher and the purpose of the study was explained.

### **Data Collection**

Multiple sources of information were collected through observation, informal

conversations, interviews, and field notes. These collection methods provided information that the researcher used to discover culture care beliefs, values, and practices related to HAPUs. Ethnonursing research questions were developed and guided the research. Throughout the research process, the researcher frequently referred to the following questions in order to maintain the focus of the study:

- Q1. What are the culture care beliefs, values, and practices of acute care medical surgical nurses as they care for the patient with a HAPU?
- Q2. What is the nursing culture or nursing unit subcultures on the acute care medical-surgical unit, specifically regarding the culture care beliefs, values, and practices of the care provided to the patient with a HAPU, as perceived by the medical surgical nurses?
- Q3. What factors in the acute care hospital nursing culture or nursing unit subcultures support the medical-surgical nurses as they express beliefs, values, and practices demonstrating pressure ulcer prevention intervention and documentation? What factors do not support the medical-surgical nurses in this manner?
- Q4. Is there evidence of Leininger's (2006a) modes of culture care preservation and/or maintenance, accommodation and/or negotiation, or repatterning and/or restructuring by the acute care medical surgical nurse, specifically focusing on culture care beliefs, values, and practices of the care provided to the patient with a HAPU?
- Q5. How do acute care medical surgical nurses describe any changes in their culture care beliefs, values, and practices over time, specifically regarding the care of the high risk pressure ulcer patient after having a patient with a HAPU?

## Research Enablers

In developing the ethnonursing method, Leininger (2006b) established tools called enablers for the researcher to use during data collection. By using the enablers, the researcher was able to organize the data and perform a rigorous study as described below.

**Observation-Participant-Reflection (OPR) enabler.** Leininger (2006b) discussed the importance of observation as a way to become more aware of the entire context of the DOI. The OPR enabler was designed to guide the researcher in spending adequate time in observation of the culture before beginning to participate. The researcher was cross-training as an RN on the medical-surgical unit in the acute care setting and wore the same color scrubs and identification badge as the medical-surgical nurses. Permission to observe as a medical-surgical nurse was granted by the Chief Nurse Executive Officer of the acute care hospital (see Appendix D).

The OPR enabler was used in this study as field notes were compiled every day that the research was conducted, with the researcher writing detailed reflections of observations and preliminary meanings. By using the OPR enabler, the researcher gained a solid awareness of the situation before participating.

Through a visible presence on the medical-surgical units over a multi-month period, the researcher's role moved from observer of care to a participant of care. As an observer, initial impressions were recorded, acknowledging personal likes, dislikes, and judgments, thus allowing them to be consciously acknowledged and put aside. Initial visits allowed the researcher to make note of physical cues in the environment, such as communication boards and the use of equipment and technology. As an active participant, data collection included observations of nursing activities, such as the use of the Braden pressure ulcer risk assessment scale, use of

evidence-based best prevention interventions, and nursing documentation.

Reflection was an important component of the OPR, and reflection was an integral part of the research process, guiding each new step, instead of being merely a final step. Ongoing and careful observations, with accurate recordings of observations, were an essential part of this study and contributed to the identification and management of biases. Sociocultural interactions with and between the informants were noted and documented. The data were recorded in a field journal without personal identifiers.

**Stranger-to-trusted-friend enabler.** The stranger-to-trusted-friend enabler (see Figure 3), was the first enabler developed by Leininger (2006b). In qualitative research, the researcher strives to form credible meanings, and this can only occur if the informants provide accurate information. If the researcher remains a distrusted stranger throughout the research process, then findings may not be accurate. Leininger (2006b) developed this enabler to assist the researcher in gauging where she/he falls on a continuum from stranger-to-trusted-friend. The researcher used the stranger-to-trusted-friend enabler as a personal self-assessment of behaviors, feelings, and responses during the observation and participation time on the medical-surgical units. Through time, familiarity, and use of the OPR enabler, the researcher was able to move to a position of trust. As a trusted-friend, the researcher was able to ensure a credible, meaningful, and accurate study.

Figure 3. Leininger's stranger-to-trusted-friend enabler guide.

Indicators of stranger (Largely <i>etic</i> or outsider's view) Informant(s) or people are:	Date noted	Indicators as a trusted friend (Largely <i>emic</i> or insider's views) Informant(s) or people are:	Date noted
1. Active to protect self and others. They are "gate keepers" and guard against outside intrusions. Suspicious and questioning.		1. Less active to protect self. More trusting of researchers (their "gate keeping is down or less"). Less suspicious and less questioning of researcher.	
2. Actively watch and are attentive to what researcher does and says. Limited signs of trusting the researcher or stranger.		2. Less watching the researcher's words and actions. More signs of trusting and accepting a new friend.	
3. Skeptical about the researcher's motives and work. May question how findings will be used by the researcher or stranger.		3. Less questioning of the researcher's motives, work and behavior. Signs of working with and helping the researcher as a friend.	
4. Reluctant to share cultural secrets and views as private knowledge. Protective of local lifeways, values, and beliefs. Dislikes probing by the researcher or stranger.		4. Willing to share cultural secrets and private world information and experiences. Offers most local views, values and interpretations spontaneously or without probes.	
5. Uncomfortable to become a friend or to confide in stranger. May come late, be absent and withdraw at times from researcher.		5. Signs of being comfortable and enjoying friends and a sharing relationship. Gives presence, on time, and gives evidence of being a "genuine friend."	
6. Tends to offer inaccurate data. Modifies "truths" to protect self, family, community, and cultural lifeways. <i>Emic</i> values, beliefs and practices are not shared spontaneously.		6. Wants research "truths" to be accurate regarding beliefs, people, values and lifeways. Explains and interprets <i>emic</i> ideas so researcher has accurate data.	

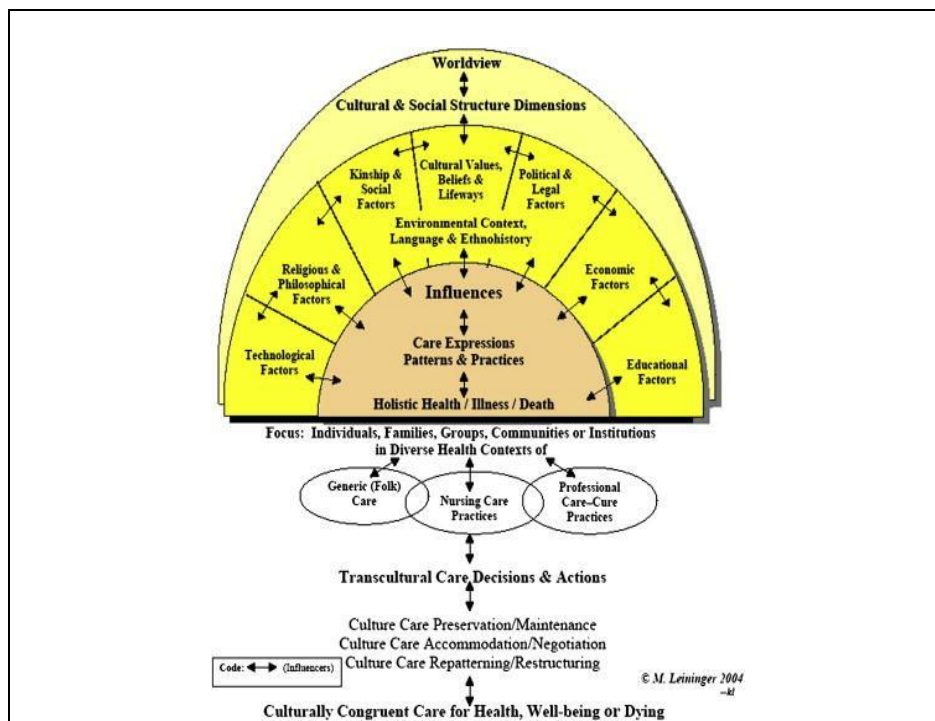
*Note.* Adapted from "Ethnonursing: A Research Method with Enablers to Study the Theory of Culture Care," by M. M. Leininger, 2006b, in M. M. Leininger & M. R. McFarland (Eds.) *Culture Care Diversity and Universality: A Worldwide Nursing Theory*, 2nd ed, p. 51. Reprinted with permission.

**Sunrise enabler.** The sunrise enabler (see Figure 4) served as a guide for observations as well as organizing interview data in this study. According to Leininger (2006a), gathering data



and interpreting the interrelationships among the components of the sunrise enabler will help the researcher to better understand informant responses. The sunrise enabler was utilized in developing a systematic assessment of a nurse's ethno history, including social structure factors such as religious, philosophical, political, legal, economic, kinship, education, technology, and cultural values, beliefs, and lifeways. As seen in Appendix F, an open ended inquiry guide for interviewing was developed. The open ended inquiry guide was not given to the informants, but rather used by the researcher to provide a holistic profile of culture care meanings, expressions, and patterns associated with the acute care medical-surgical nurses beliefs, values, and practices related to the care provided to a patient who had a HAPU.

Figure 4. Leininger's sunrise enabler to discover culture care.



Note. The comprehensive and multiple influences on care and culture are depicted in this figure. Adapted from "Culture Care Diversity and Universality Theory and Evolution of the Ethnonursing Method," by M. M. Leininger, 2006a, in M. M. Leininger & M. R. McFarland (Eds.) *Culture Care Diversity and Universality: A Worldwide Nursing Theory*, 2nd ed, p. 25. Copyright 2004 by M. Leininger. Reprinted with permission.

Nursing care practice questions related to possible unavoidable HAPU were developed using the three theoretically predicted action and decision modes of culture care (Leininger, 2006a) as a guide (see Figure 5).

Figure 5. Predicted action and decision modes of culture care.

Transcultural Care Decisions & Actions	Observed/Reflection/Interview
<p><b>Culture Care Preservation/Maintenance</b> Assistive, supportive, facilitative, or enabling professional acts that help cultures to retain, preserve, or maintain beneficial care beliefs and values or to face handicaps and death.</p>	<p>Patient admitted from home with their own requests/regimes Turning – dressings – ointments - diet Care plan – education guide – how do you teach – document Total Braden and/or Individual Category Documentation</p>
<p><b>Culture Care Accommodation/Negotiation</b> Assistive, accommodating, facilitative, or enabling creative provider care actions or decision that help cultures adapt to or negotiate with others for culturally congruent, safe, and effective care for the health, wellbeing, or to deal with illness and dying.</p>	<p>Cooperative with change in care/new care/education Hemodynamically unstable – unable to turn Medical Devices (trach, peg tubes, oxygen tubing/leg braces/anti-embolism stockings or SCDs) – assess skin Palliative/Hospice – position of comfort Documentation</p>
<p><b>Culture Care Repatterning/Restructuring</b> Assistive, supportive, facilitative, or enabling professional actions and mutual decisions that help people to reorder, change, modify, or restructure their lifeways and institutions for better (or beneficial) health care patterns, practices, or outcomes that help cultures to retain, preserve, or maintain beneficial care beliefs and values or to face handicaps and death.</p>	<p>Refusal of Care Turning/Turn Assist Positioning (TAP) System Nutrition Documentation</p>

*Note.* These three action-decision care modes were held to be essential for caring. Adapted from “Culture Care Diversity and Universality Theory and Evolution of the Ethnonursing Method,” by M. M. Leininger, 2006a, in M. M. Leininger & M. R. McFarland (Eds.) *Culture Care Diversity and Universality: A Worldwide Nursing Theory*, 2nd ed, p. 8. Reprinted with permission.

The key informants’ decisions related to culture care preservation, accommodation, or repatterning and how they documented that care was incorporated into this guide and was shared

with the researcher. It is this enabler that provided the researcher emic data needed for an understanding the researcher emic data needed for an understanding of the unavoidable HAPU phenomenon as situations related to unavoidable pressure ulcer such as hemodynamic instability, impaired perfusion, nonadherence to prevention interventions, and medical device-related pressure ulcers were discussed.

### **Personal Interviews**

After consenting to participate, face-to-face interviews were scheduled. All face-to-face interviews occurred outside the hospital or within the hospital setting, but off the key or general informants' specified units. The interviews were scheduled and completed with consideration made to not disrupt the work routines of the informants. All interviews were digitally recorded. Each informant could tell the researcher at any time to not include a portion of the conversation or ask the researcher to turn the digital recorder off. Each informant was allowed to stop participation at any time and could decide to not be included in the study with an understanding that all information, including any record of what was recorded, would be destroyed and not be part of the study.

### **Data Management**

Self-reported data were collected from the key and general informants during an interview process. In order to maintain the confidentiality of informants, each informant was given a number for data entry, analysis, and discussion purposes. The informants were assigned consecutive numbers based on the order of their enrollment in the study. The interviews were digitally recorded and the digital file contained only the participant number. Likewise, all transcripts contained only the participant number to ensure confidentiality.

Digital recorded interviews were sent via a secure password protected website to a transcriptionist who signed a confidentiality agreement. The transcriptions were stored in a locked file cabinet in the researcher's private residence. The digital recordings were downloaded to a password protected computer and a back-up copy stored on a flash drive and placed in a locked file cabinet in the researcher's private residence. The digital recorder was also stored in a locked file cabinet in the researcher's private residence. The consent forms were stored in a different drawer of a locked file cabinet in the researcher's private residence.

To verify accuracy of transcription, the researcher listened to the audio recordings as she read the transcripts. The researcher replaced any identifying information such as names and locations with a pseudonym or the information was deleted if not needed to understand the context of the statement. In addition, the chair of the dissertation committee and the committee members had access to the transcripts as needed via a secure university website. All hand written personal documentation collected as a result of using the research enablers were kept with the researcher at all times while on the units. When not on the units, the personal hand written documents were kept in a locked file cabinet in the researcher's private residence.

### **Data Analysis**

Leininger (2006b) developed an ethnonursing data analysis enabler that was used to systematically analyze data in an organized and rigorous manner. This enabler has been used since 1965, and has been revised several times; it is now a four-phase process of analysis (Leininger, 2006b). During the First Phase, field journal notes were organized and coded with preliminary meanings early in the process. Policy and procedures for pressure ulcer risk assessments, pressure ulcer prevention interventions, and nursing documentation of the

interventions were reviewed. Bulletin boards and formal documents such as institutional philosophy statements were reviewed. Interviews with key informants and general informants were completed and transcribed into Microsoft Word ® documents. The Second Phase consisted of continued organization of descriptions, comparisons, categorization of data, and preliminary interpretations according to the DOI. In the Third Phase, patterns were identified and data carefully analyzed for meanings-in-context. These three phases continued throughout the data collection process until saturation was reached. During the Fourth Phase, major themes and research findings were synthesized. The data analysis enabler provided a systematic process for concurrent data collection and analysis, facilitating confirmability through an audit trail (Leininger, 2006b).

### **Trustworthiness**

Ethnonursing studies should be evaluated according to six criteria (Leininger, 2006b). These criteria are incorporated into the enablers; therefore, proper use of the enablers assisted the researcher in conducting a trustworthy study. Leininger's (2006b) six criteria include: (a) credibility; (b) confirmability; (c) meaning-in context; (d) recurrent patterning; (e) saturation; and (f) transferability.

### **Ethical Considerations**

#### **Biases and Assumptions**

Creswell (1998) stated that the researcher is an intimate part of the research process, that biases and values are inherent in the research process and are to be incorporated into interpretations rather than avoided, and that the researcher's voice is heard in the research report. Leininger (2006b) agreed that the researcher is an intimate part of the research process, but

cautioned the researcher to identify, acknowledge, and set aside biases in order to hear and understand the emic knowledge of the culture. While Creswell discussed research findings incorporating the researcher's voice, Leininger (2001, 2006a, 2006b) emphasized the voice of the people as the source of knowledge. Leininger and Creswell both agree that the qualitative researcher uses induction and member check to develop meanings from context, using research questions as a guide to emerging themes. Leininger (2006b) recommended that biases be dealt with through acknowledgement, ongoing self-reflection, and discussion of findings with a mentor.

The researcher has clinical knowledge and expertise related to pressure ulcer development and implementation of prevention interventions, and is familiar with the body of professional literature devoted to this topic. When the study began, the researcher was known as a Certified Wound, Ostomy, Continence Nurse (CWOCN) for the acute care institution whose responsibilities included ensuring that nurses in all specialties, including those caring for patients in medical-surgical units, have an understanding of evidence-based guidelines and have incorporated these into their practice. Included in these guidelines are those for pressure ulcer risk assessment, prevention, and documentation. In addition, the researcher assumed that the perspectives of the group closest to the phenomenon of interest, in this case the nurses caring for patients who have a HAPU on the medical-surgical units, would help enhance the understanding of the phenomenon of interest, unavoidable pressure ulcers, and that these perspectives may lead to new insights that would inform clinical practice. Leininger (2006b) cautioned that ethnocentrism, as well as etic knowledge gained through professional socialization, can cloud accurate interpretations of data. Therefore, Leininger (2006b) developed the OPR enabler to

encourage ongoing self-reflection during the study as the researcher becomes immersed in the culture. As further hunches and biases emerge throughout the study, the researcher was able to acknowledge these and separate them from the findings. Some initial biases and hunches are acknowledged below:

1. The researcher assumed that the acute care medical-surgical nurse is implementing and documenting pressure ulcer prevention interventions.
2. The researcher assumed that the acute care medical-surgical nurse may not be aware of the importance of documenting pressure ulcer prevention interventions as it relates to the determination of an unavoidable pressure ulcer.
3. The researcher assumed that the acute care hospital promotes a culture of patient safety by being aware of the nurses' abilities to provide pressure ulcer prevention care and complete the documentation of that care.

### **Human Rights Considerations**

**Patients.** The researcher's current capacity as a CWOCN includes a broader oversight of the phenomenon of interest and a fuller understanding of the policies and guidelines within the acute care institution. With this knowledge, the researcher had an obligation to avoid, prevent, or minimize harm to not only the informants, but for any patient under observed or direct care by the researcher. The researcher made arrangements for urgent confidential reporting of any patient safety issue to each unit's Nurse Manager or Resource Nurse. This arrangement ensured safe patient care in a timely manner without having a direct intervention by the researcher with the informants. The confidential reporting supported the movement of the researcher from stranger-to-trusted-friend.

**Informants.** Before entering the setting or commencing data collection, Institutional Review Board approval was obtained from Loyola University Chicago, as well as from the hospital system in which the study took place as depicted in Appendix G. To obtain written documentation of informed consent, the researcher met with all informants before the interviews. The researcher specifically spoke to the informants about the risks and benefits of participation, adherence to confidentiality, and their right to withdraw or revoke participation at any time. There were no foreseeable risks or direct benefits associated with participation in this study, however, some indirect benefits included a forum to express ideas and contribute to the body of nursing knowledge. All informants received a signed copy of the informed consent document (see Appendix H).

### Summary

With the use of the ethnonursing method and careful use of established research enablers, the culture care beliefs, values, and practices of acute care medical-surgical nurses as they care for the patient with a HAPU, as well as that of the hospital culture, were understood. This methodology allowed credible meanings to emerge as well as the promotion of both rigor and reflexivity. The research was able to contribute to the body of nursing knowledge regarding the implementation of pressure ulcer prevention interventions and documentation by the acute care medical-surgical nurse who had cared for a patient with a HAPU. Such an understanding was essential in providing evidence-based actions to improve nursing care, as well as to support Leininger's (2006a; 2006b) theory of culture care universality and diversity. Understanding the nurses' culture beliefs, values, and practices also assisted in the discovery of scientific dimensions of care related to the phenomenon of unavoidable pressure ulcers.



## CHAPTER FOUR

### RESULTS

The purpose of this chapter is to present the culture care beliefs, values, and practices of the acute care medical-surgical nurses who have cared for a patient who developed a HAPU. Using Leininger's ethnonursing research method, data were collected through observation, informal conversations, interviews, and field notes. First, a discussion of the sample, recruitment of participants, data collection, and analysis are presented. A presentation of the findings follows, and the chapter concludes with a discussion of the enablers used to demonstrate methodological trustworthiness of the study.

#### **Sample**

Seven acute care medical-surgical nurses who had provided direct care to a patient who developed a HAPU within the past 30 days were interviewed in a face-to-face format. The participants, known as the key informants, were registered nurses currently working on one of four medical-surgical units in an acute care hospital located in the mid-west United States. The key informants consisted of 6 females and 1 male, ranged in age from 23 to 52 years, with 4 having an associate's degree in nursing and 3 having a bachelor's degree in nursing. Years of experience in their current positions ranged from 1.5 years to 19 years. The specific location of the HAPU on the body, along with the reported stage of the ulcer, were as follows: a heel as an unstageable, an ear as a Stage IV, a chin as a suspected deep tissue injury, a thigh as an unstageable, and three separate coccyx ulcers each as a Stage III (see Table 1).

Table 1. Key Informant Demographics with Location, Stage and Related Factors of the HAPU

Key	Age	Gender	Ethnicity & Education Years Present Position	HAPU Location	HAPU Stage	Factors
K01	52	F	White/ADN 19	Heel	Unstageable	End-of-Life
K02	34	F	Hispanic/ADN 5	Ear	Stage IV	MDR Oxygen Tubing
K03	26	F	White/ADN 2.5	Chin	SDTI	Prolonged Surgery
K04	27	F	White/BSN 4	Coccyx	Stage III	Comorbidities Malnourished
K05	38	M	Hispanic/BSN 15	Thigh	Unstageable	MDR Ace wrap
K06	38	F	White/ADN 28	Coccyx	Stage III	End-of-Life
K07	23	F	White/BSN 1.5	Coccyx	Stage III	End-of-Life

*Note.* ADN = Associate Degree in Nursing; BSN = Bachelor of Science in Nursing; HAPU = Hospital-Acquired Pressure Ulcer; MDR = Medical Device Related pressure ulcer; SDTI = Suspected Deep Tissue Injury

Sixteen participants, known as general informants, were interviewed in a face-to-face format. The general informants had knowledge of pressure ulcer prevention and documentation on the medical-surgical units; however, the general informants came from differing disciplines or had different nursing roles than those of the key informants. The general informants consisted of 12 females and 4 males, ranged in age from 20 years to 60 years, with years of experience in their current positions ranging from 5 months to 22 years. The specific disciplines were as follows: a physical therapist, a nurse educator, a CWOCN, a respiratory therapist, a certified registered nurse anesthetist, a registered nurse circulator, a dietician, a director of nursing, a physician working as a hospitalist, two nurse managers, two resource registered nurses, two nursing assistants, and one certified nursing assistant (see Table 2).

Table 2. General Informant Demographics with Location, Stage and Related Factors of the HAPU

Key	General	Age	Gender	Ethnicity & Position/ Years in Present Position	HAPU Stage	Factors
K01	G1a	40	M	Asian Indian Physical Therapist/15	Heel Unstageable	End-of-Life
	G1b	20	F	White NA/5 months		
	G1c	53	F	White Nurse Educator/5		
K02	G2a	30	F	White CWOCN/1	Ear Stage IV	MDR Oxygen Tubing
	G2b	55	F	Asian/Vietnamese Respiratory Therapist/6		
K03	G3a	60	M	White CRNA/29	Chin SDTI	Prolonged Surgery
	G3b	57	F	White RN Circulator/2.5		
	G3c	37	F	White NA/7 months		
K04	G4a	31	F	White Dietician/5	Coccyx Stage III	Comorbidities Malnourished
	G4b	29	F	White Nurse Manager/1.5		
K05	G5a	59	F	White Nursing Director/22	Thigh Unstageable	MDR Ace Wrap
	G5b	27	M	Hispanic Resource Nurse/6 months		
K06	G6a	59	M	White Hospitalist Physician/4	Coccyx Stage III	End-of-Life
	G6b	24	F	White CNA/6		
K07	G7a	48	F	White Resource Nurse/1.5	Coccyx Stage III	End-of-Life
	G7b	48	F	Indian Nurse Manager/8		

*Note.* Ordering of the General Informants (G) in sequence with the Key Informants (K). CNA = certified nursing assistant; NA = nursing assistant; CRNA = certified registered nurse anesthetist; CWOCN = certified wound, ostomy, continence nurse.

## **Recruitment**

To recruit the sample of key informants, a flyer, as seen in Appendix C, was posted in the bathrooms and in the break rooms on each medical-surgical unit. Each key informant was a self-referral and contacted the researcher through email or by phone. The researcher met face-to-face with seven potential key informants to ensure that inclusion criteria had been met, explain the purpose of the study, answer any questions, and if they agreed to participate, obtain informed consent. All seven agreed to participate and were interviewed for the study. All key informants received a \$10 gift card as a token of appreciation at the completion of the interview.

The seven key informants and nurse managers from the medical-surgical units recommended names of potential general informants after each interview as general informants needed to have knowledge of pressure ulcer prevention interventions related to the key informants' patient with the HAPU. The researcher contacted, via email, three potential general informants for each key informant's HAPU patient. Of the 21 potential general informants, the researcher met face-to-face with 16 general informants who were willing to participate to ensure that inclusion criteria had been met, explain the purpose of the study, answer any questions, and obtain informed consent. All general informants received a \$10 gift card as a token of appreciation at the completion of the interview.

## **Data Collection**

Data were collected through observation, informal conversations, interviews, and field notes with the use of qualitative research tools, known as enablers: the OPR enabler, stranger-to-trusted-friend enabler, sunrise enabler, and personal interviews.

## **Enablers**

The Observation-Participation-Reflection enabler was used as a guide to obtain focused observations of informants within their natural and familiar work environment. This ethn nursing data collection guide is divided into four sequenced phases. In the first phase, observation and listening, the researcher, also known in the hospital system as a CWOCN, was introduced to the staff as a RN cross-training onto the acute care medical-surgical units. These introductory meetings took place repeatedly over approximately three weeks in the month of June 2015. During this time there was an RN shortage in the hospital and training of the researcher in the staff RN role was accepted as ordinary as other RNs from various departments within the hospital system were also being cross-trained on the medical-surgical units. In this phase, the researcher observed, listened, and interacted only minimally with staff RNs. The focus was on observations with the aim of keeping a broad perspective to look at the total context of what was being observed as much as possible.

Each of the four medical-surgical units is rectangle in shape with patient rooms located on the perimeter and a nursing station with computers for charting at each corner within the rectangle (see Appendix I). Each patient room also included access to a computer for patient charting. Within the central core, clean supply rooms were stocked daily with supplies for pressure ulcer prevention such as: heel boots to suspend heels, turn and position (TAP) sheets with wedges for positioning off bony prominences, incontinent pads and barrier creams for incontinence, and wound care dressings.

Throughout the second phase, observations with little participation, the researcher was interested in contextual issues such as the design characteristics of the units, the availability of

pressure ulcer prevention equipment, as well as the availability of computers for documentation. Although participation in direct care was minimal, the researcher was able to focus more in-depth on the domain of interest, pressure ulcer prevention and documentation of interventions, with emphasis on daily routines, specific care acts, and care values of the medical-surgical nurse. The goal was to begin to identify regularities and preliminary categories and patterns of care, including how the RNs documented pressure ulcer risk and skin assessments, and pressure ulcer prevention implementation.

Wearing the color scrubs of the RNs, the researcher moved into the third phase, active participation, by working alongside the medical-surgical RNs, attending bedside RN-to-RN reports, listening to the NA-to-NA reports, and observing with a focused intent on how pressure ulcer prevention care was provided and documented by the RNs and the NAs. The researcher also attended multidisciplinary rounds (MDRs) and unit safety huddles, two specific scheduled times where staff came together to discuss specific patient concerns and the plan of care, which could include pressure ulcer risk and prevention. Because of the participative presence on the medical-surgical units during approximately 200 hours of day and evening shifts from June 2015 through December 2015, the researcher's role moved from stranger-to-trusted-friend. For example, the researcher was invited and welcomed to share breaks and lunches with staff where values and beliefs of working situations were openly shared. It was also during this phase that the researcher scheduled face-to-face interviews with key and general informants. Using an open ended inquiry guide based off of the sunrise enabler, as seen in Appendix F, the researcher was able to assess the informant's cultural values, beliefs, and practices related to the care of a patient with a HAPU. Using the action and decision modes of culture care (Figure 5), informants

were asked questions related to the care of a patient with a possible unavoidable HAPU.

The fourth phase, reflection and confirmation, was an important component throughout the entire research period. During and after each shift and interview, the researcher wrote personal assessments of behaviors, feelings, and responses related to the observations, participations, and interviews, in a journal. The journal consisted of a spiral notebook with multiple pages of handwritten narratives.

### **Personal Interviews**

The researcher conducted 23 face-to-face interviews. Interview times and locations were based upon the convenience of the informant. After consenting to participate, all 7 key informant interviews and 14 of the general informant interviews occurred in a private location within the hospital setting. Two general informants preferred to meet outside of the hospital while off duty. Duration of the interviews ranged between 18 minutes to 43 minutes. Data collection occurred over a 6 month period, spanning June 2015 through December 2015. Interviews were audio recorded using a digital recorder. The researcher asked basic demographic questions at the beginning of the interview and then used the open inquiry guide to focus the interview on pressure ulcer prevention and documentation.

In order to maintain the confidentiality of key informants, each was given a number for data entry, analysis, and discussion purposes. The 7 key informants were assigned consecutive numbers, based on the order of enrollment in the study depicted with a K for key and the associated number. For example, the first key informant was identified as K01, the second key informant as K02, with the sequential assignments ending in K07. The general informants, depicted with a capital G, were also assigned numbers based on and their direct knowledge about

the key informant's patient with a HAPU with the addition of an alphabet letter in the order of enrollment. For example, the general informants that had direct knowledge about K01 were identified as G1a, G1b, and G1c. The general informants that had direct knowledge about K02 were identified as G2a and G2b. This sequential assignment continued for all 16 general informants and ended with G7a and G7b as confidential identifiers. Both key and general informants readily discussed positive and negative values, beliefs, and views of caring for a patient with a HAPU.

During the interviews, the researcher took brief notes to assist with follow-up questions and to assist with recall of key points. After several interviews, recurrent patterns of values, beliefs, and practices related to the care of a patient with a HAPU began to emerge. At the end of subsequent interviews, informants were asked focused questions related to the emerging recurrent patterns to elicit their feedback. Recognition of the patterns was facilitated by reviewing transcripts and journal notes. The patterning was noted over time until, in subsequent interviews, it became pervasive enough that saturation was confirmed.

Two minor issues arose during the data collection process. The first was when an interview took place away from the key informant's unit, but in a conference room that was also a pass through into an office. A sign was placed on the door informing those who might enter that an interview was in progress, but this did not negate entry. After two interruptions, the interview was moved to a quieter conference room and the interview was completed. The second was when a key informant thought she was able to take a break from patient care for the interview, but was interrupted numerous times for patient care questions via her mobile communication device. She was able to locate a peer to cover her patients and the interview was



completed.

After each interview and transcription, the researcher compared the transcripts to the audio recording to ensure accuracy of transcription. Any identifying information such as names of people and locations was replaced with a pseudonym or deleted if not needed to understand the context of the statement.

### **Analysis**

Over 325 pages of data were transcribed from the interviews with key and general informants, with each line within the transcription identified by sequential numbering. For referencing purposes, K01.123 would indicate a statement made by key informant number one that could be found on line 123 in the informant's associated transcribed document. In addition, data from the field observations were recorded in a 75-page field journal. All interview and observation data were coded using the four phases of analysis for ethn nursing qualitative research using the Data Analysis Guide (Leininger, 2006b).

During the First Phase, using the OPR enabler and field journal notes, as well as interview transcriptions, data were organized and coded with preliminary meanings related to patient care. For example, the policy and procedures for pressure ulcer risk assessments and nursing documentation were reviewed. The policy states that skin assessments, including Braden risk assessments, are to be completed and documented within the first 24 hours of admission, daily, upon transfer to other units, and before discharge (see Appendix J). Using the OPR Enabler, the researcher was able to note whether or not the medical-surgical nurses on the units were complying with the policy. During admissions, it was noted that the Braden risk scale was routinely completed, but completing skin assessments were not always a priority for the nurse.

Key informant interview statements concurred with the researcher's observations:

K02.326: The first assessment priority is the lungs, bowel sounds, and the heart.

K07.57: I do a Braden on admission and try to do a full head to toe skin assessment on every admission and then from there it depends on their risk.

The researcher also noted that communication between the RN and the NA relating to pressure ulcer prevention care was inconsistent. This observation was supported by both key and general informant statements as follows:

K03. 163: There is no specific time for RN to NA report. After NA to NA report, the NAs are supposed to come and talk to us.

G1c.151: RN to NA report varies and I think it's a problem. I think there's a disconnect, at least the first couple of hours, between the nurse and the NA.

The researcher began to compile a list of descriptors, such as "skin assessments are not a priority" and "inconsistent communication" to characterize the preliminary interpretations to heighten cultural sensitivity during Phase One.

The Second Phase consisted of identifying and categorizing descriptors and components related to the culture care beliefs, values, and practices associated with the care of a patient with a HAPU. Using the inductive approach, the researcher went through the interview transcripts, line by line, highlighting key words or phrases within the transcripts. These key words or phrases were then copied and pasted into 12 categorical tables under the headings conceived from the Sunrise Model (Leininger, 2006a): communication of care, economics, kinship and peers, education of pressure ulcer prevention, non-reimbursement, patient education, technology use, and nursing care, which included philosophy of care, documentation of care, priority of care, and risk interventions. Both key and general descriptors were studied within the context for similarities and differences. Recurrent components, such as the lack of adequate staffing as the

cause of HAPUs and documentation of care, were studied for their meanings.

During the Third Phase, data were scrutinized to discover saturation of ideas and recurrent patterns of similar or different meanings related to the culture care beliefs, values, and practices associated with the care of a patient with a HAPU. For example, not having enough staff to provide care affected how nurses prioritized patient assessments, documented their care, and communicated with other care providers. There was a common belief that time for assessments and documentation was limited:

K04.115: We're running and we have to tag team and move to the next patient. I can't say that we honestly document every single time. Because of staffing, we make sure our patients are safe, they're comfortable, and then we move on.

In the Fourth Phase, themes of behavior and other summative findings were identified. Fourth Phase analysis included synthesis and interpretation of major themes, theoretical formulations and recommendations. The next section presents the culture care themes and their sociocultural influences associated with the care of the acute care medical-surgical patient with a HAPU.

### **Findings**

Themes were generated using the ethnonursing method and were derived from acute care medical surgical nurses who cared for a patient with a HAPU (emic) as well as from staff that had knowledge of pressure ulcer prevention and documentation (etic). Two universal themes and two diverse themes and their respective sociocultural influences were abstracted from observations, informant descriptors, and patterns. Universal themes were identified based upon the recurrent, observed, and expressed commonalities and similarities among the informants. The diverse themes were broadly reported but revealed recurrent, observed, and expressed

variabilities and differences among the informants. The following findings answer the broad research questions that guided this study:

- Q1. What is the nursing culture or nursing unit subcultures on the acute care medical-surgical unit, specifically regarding the culture care beliefs, values, and practices of the care provided to the patient with a HAPU, as perceived by the medical surgical nurses?
- Q2. What factors in the acute care hospital nursing culture or nursing unit subcultures support the medical-surgical nurses as they express beliefs, values, and practices demonstrating pressure ulcer prevention intervention and documentation? What factors do not support the medical-surgical nurses in this manner?
- Q3. How do acute care medical surgical nurses describe any changes in their culture care beliefs, values, and practices over time, specifically regarding the care of the high risk pressure ulcer patient after having a patient with a HAPU?

In this presentation of findings, the Universal and Diverse themes are capitalized. Each theme is presented along with supporting pattern data. Informant quotes are provided to support the category descriptions. Each quote is preceded by a series of numbers which represent the informant's number and page number of the transcript, for example, K01.10 indicates key informant number 1, transcript page number 10. The following four themes reflect the similarities and differences of culture care related to the patient with a HAPU on an acute care medical-surgical unit:

- Universal Theme I: *Care of adults experiencing a HAPU included incomplete skin assessments by the medical-surgical nurse influenced by priority setting practices and kinship relationships within the social structure of the hospital system.*

- Universal Theme II: *Care of adults experiencing a HAPU was impacted by the medical surgical nurse's inability to implement pressure ulcer prevention interventions influenced by the economical staffing patterns within the social structure of the hospital system.*
- Diverse Theme I: *Care of adults experiencing a HAPU included diverse documentation regimes of pressure ulcer prevention interventions by the medical-surgical nurse influenced by care rationing practices and technical factors within the social structure of the hospital system.*
- Diverse Theme II: *Care of adults experiencing a HAPU on an acute care medical-surgical unit included diverse multidisciplinary collaborative pressure ulcer prevention efforts influenced by silo social structures within the hospital system.*

### **Universal Culture Care Theme I**

Care of adults experiencing a HAPU included incomplete of skin assessments by the medical-surgical nurse. Two culture care patterns for Universal Theme I were identified from participant observation, recurrent categorized descriptors, and raw data. The two patterns underpinning Universal Theme I were: UIa) completion of skin assessments was optional influenced by priority setting practices; and UIb) the responsibility of skin assessments was placed upon kinship relationships.

**Care pattern UIa: Completion of skin assessments was optional.** HAPU may be a result of incomplete documentation of the admission skin assessment as noted in the following statement:

G5a.2: I think sometimes they look like they're hospital-acquired ulcers because maybe the admitting nurse didn't do the skin assessment like she should have. We did have a couple instances, probably about two or three months ago, where we did find pressure

ulcers on prevalence and when we went back the patients did come in with them but unfortunately there wasn't any documentation.

Skin assessments, which involve a head-to-toe assessment of any potential injury to the skin over bony prominences, under dressings, and under medical devices, were regarded as having a low priority among the medical-surgical nurses. The following descriptors depict the pattern.

A Stage IV pressure ulcer was found under oxygen tubing on an ear by the certified wound, ostomy, continence nurse (CWOCN) who was consulted for incontinence associated dermatitis. Within the CWOCN practice, a head-to-toe assessment is performed regardless of the reason for the consultation. The primary medical-surgical nurse assigned to the patient had been working in healthcare for approximately 13 years, both as a nurse tech and medical-surgical nurse. She recognized that there are many causes of pressure ulcers and stated they are found mostly on the bony areas of the body. She admitted that she had not checked the skin on the ear, but was well aware that equipment, such as oxygen tubing, could create pressure ulcers.

K02.14: We don't pay attention really if they slip on the one side, rub on the ear and then of course it's going to start an ulcer. Things get on your mind and you are not checking well. To be honest, I didn't look into it. We fail.

Additional medical-surgical nurses caring for patients with hospital-acquired pressure ulcer also ranked skin assessments lower in their hierarchy of care than other assessments. K05 had a patient with an unstageable pressure ulcer on the thigh from an ace wrap applied in the operating room directly after a surgical procedure. The ace wrap had not been removed even when K05 noticed that "the habitus of the person was that their upper thigh was larger and I think they tried to wrap it so it would stay in place." The post-operative order was to not remove the ace wrap for 48 hours. K05's normal skin assessment regime is as follows:

K05.3: I'm mostly doing all the systems first and not really the skin until later. I had noticed that the top part of the ace wrap (on the thigh) had been rolled back a little bit so then I took it off and I noticed the ulcer.

K06 had been caring for a patient with a Stage III pressure ulcer on the coccyx that was determined to be hospital-acquired as there was no skin documentation on admission of the ulcer. K06 thought the pressure ulcer was most likely unavoidable as the "patient's nutrition status was very poor because he was cachexic with cancer." Although K06 agreed that since there was no admission skin assessment the pressure ulcer was determined to be hospital-acquired, her normal skin assessment routine remained as follows:

K06.9: Respiratory, your breathing, your cardiac status, your vital signs, or if you're in hypotensive shock or all those things would take precedence over skin at that point. Once your patient is stable, a little down the road, you can look at the pressure (bony prominences).

Although the hospital policy states that nurses are to complete and document skin assessments on admission, daily, and upon transfers or discharges, doing so was inconsistent.

K07 was caring for a patient who developed a Stage III coccyx hospital-acquired pressure ulcer during the time of the patient's "end-of-life." It is difficult to determine when this ulcer developed as K07 explained that:

K07.10: Doing a full head-to-toe skin assessment on every admission depends on their risk. I don't always write a full note.

General informant data revealed possible explanations for deciding to delay skin assessments. A nurse educator assigned to the medical-surgical units stated that:

G1c.2: I think that the nurses are so busy. They have so many responsibilities that sometimes actually turning someone over and looking at every part of their body is not a priority.

A CWOCN, who had been a nurse on a medical-surgical unit for 9 years prior to being CWOCN, explained why skin assessments may not be the nurse's priority:

G2a.205: I know sometimes as a nurse that is not what you do first because you're busy running around doing so many other tasks at the same time that sometimes that gets put on the back burner.

Even a hospital physician, a hospitalist, was of the same mind as the medical-surgical nurses:

G6a.1: I admittedly don't do a complete skin evaluation on every patient.

In summary, key informants described their clinical decision-making related to skin assessments as a lower priority to assessments such as that of the heart and lungs. General informants concurred with the key informants and rationalized the decision to place skin assessments below other nursing responsibilities. As such, hospital policies were not always implemented, but not doing so was believed to be justified. However, absent or incomplete skin assessments places the patient at a higher risk for a hospital-acquired pressure ulcer. More importantly, it is difficult to determine if a HAPU is unavoidable without a complete head-to-toe skin assessment and accurate documentation.

***Culture care influences.*** The first care pattern, the completion of skin assessments as optional (Care pattern UIa), was influenced by priority setting practices.

***Priority setting practices.*** Despite policies and guidelines in pressure ulcer prevention, some nurses have been known to place a low priority on fundamental aspects of patient care, such as routine skin assessments and pressure ulcer prevention (Gray & Hampton, 2015; Revello & Fields, 2012). While working alongside the nurses on the medical-surgical units, the researcher began asking the medical-surgical nurses the condition of their patient's skin



approximately 2 hours after the start of their shift. Many of the nurses reported that they had not done a skin assessment yet. The researcher then informally asked nurses during breaks why they thought skin assessments were not being completed. Nurses were asked, “Do you always check your patient’s skin from head-to-toe every shift?” and if the answer was no, “Why do you miss the skin assessment?” The majority of nurses stated that care tasks such as passing meds, providing wound care, and charting, occupied so much of their time. When time was limited, the priority was to complete “focused assessments” that related to a patient’s disease, not a complete head-to-toe patient skin assessments.

The researcher had to work through personal feelings of disappointment when it was noted that, although nurses had verbalized that a head-to-toe skin assessment had not been completed, documentation in the electronic medical record (EMR) indicated that the patient’s skin was within defined limits (WDL). WDL is a choice within a checklist on the skin assessment document flow sheet in the EMR (see Appendix K). When the researcher queried those same nurses about the WDL skin assessment documentation, nurses explained that “since the skin that was visible during my assessments of the heart, lungs, and abdomen was intact, I was comfortable charting WDL.”

Clinical decision-making is a process which nurses undertake daily when they make judgments about the attention they give patients and management issues (Banning, 2008). According to the interviewees, clinical decision-making related to the priority of skin assessments and documentation were ethically grounded and prioritized to ensure their patients’ well-being. Ethical decision-making is a rational process involving cognitive activity; however, it also involves moral judgement and justification of decisions (Kollemorten et al., 1981). The

skin assessment and documentation of care seems to be a good example of an ethically laden practice that requires a careful balancing of the values at stake. The medical-surgical nurses seemed to be placing a higher value on the patient's cardiac and pulmonary status and the completion of tasks, than that of skin integrity. Completing a skin assessment was an optional nursing task, not a priority.

**Care pattern UIb: The responsibility of skin assessments.** HAPU may be a result of a misunderstanding of who is responsible for the documentation of the admission skin assessment. The researcher overheard a conversation where the nurse stated that she “did not have time to take off the patient's wound dressings to do a complete skin assessment,” so she was “leaving this for the CWOCN.” A CWOCN is a highly prepared expert clinician who treats complex wounds, ostomy issues, and incontinence (WOCN, 2016).

A CWOCN consultation was routinely ordered when patients had a low Braden score. The Braden Scale is a scoring system health professionals use to determine a patient's risk of developing a pressure ulcer. A patient can receive a score in six categories: sensory perception, moisture, activity, mobility, nutrition, and friction/shear forces. The total scoring system ranges between 6 and 23, with a lower score indicating that the patient is at a greater risk of developing a pressure ulcer (Ayello & Braden, 2002). A patient is at risk for developing pressure ulcers if the total score is 18 or lower on the Braden Scale.

While working with the nurses on the medical-surgical units, the researcher observed that there was routine use of the Braden risk assessment scale, as this was an essential document in the EMR (see Appendix L). It was noted that when a patient was determined to be at risk in the EMR, a best practice advisory (BPA) screen would be displayed on the computer screen

directing the nurse to choose specific pressure ulcer prevention interventions to individualize the care for the patient (see Appendix M). Although head-to-toe skin assessments were not part of the nurse's daily regime, completing a Braden risk assessment was:

K03.58: I do a Braden scale on admission, a BPA pops up for high risk.

K05.8: I use the Braden score a lot of times. Orders pop up for us to do interventions.

The nurse educator for the medical-surgical units was attentive to new nurses on the unit and the use of the Braden scale:

G1c.90: The new nurses I work with now have to go through a video module so they actually know the importance of the Braden scale and what they're supposed to look for so they are looking at the score, the Braden score and if it's under 18 that they're at risk.

At first it was noted that nurses could do what was termed a "work around" and not complete the BPA, but during the month of August 2016, the information technology (IT) department instituted a stop gap that prevented the nurses from signing their note if the BPA was not utilized. The pressure ulcer prevention intervention list included: positioning instructions; use of incontinent products; use of pressure reducing medical devices including specialty beds; and if needed, consultations by the CWOCN/ Enterostomal (ET) nurse, dietician, or physical therapy. One of the interventions from the BPA list that was routinely ordered was to consult the CWOCN. Consulting the CWOCN was a common practice when the Braden score was 18 or less as depicted by the following statements by the medical-surgical nurses:

K04.8: If doctors are busy we can put in our own orders. We do our ordering per protocol so that way the doctors are perfectly okay with an ET wound consult.

K05.7: Having the CWOCN available where we can call them and ask them questions and come to evaluate certain patients. I think that for me it's been kind of like a great benefit.

K07.10: I feel like the ET nurses are a big help. I know I can put in that consult per protocol on my own. I don't need a physician's order.

K03 had a patient with a "scratch" on the chin that developed into a hospital-acquired suspected deep tissue injury (SDTI) after being in a prone position for a prolonged surgical procedure. K03 was not aware that a SDTI may take up to 48 hours to develop and stated that in the future:

K03.17: If I see something like that (a reddened area) knowing that a person was in that position for an extended period of time, I would put in a consult for the ET.

In the acute care facility, the presumption that a CWOCN would be available to complete skin assessments and recommend care 24 hours, 7 days a week was misconstrued. There are 3 full-time CWOCNs working within the acute care system, which includes three separate facilities, each approximately 30 minutes apart from one another. Also, the CWOCNs only work 8:00 AM to 4:30 PM, Monday through Friday, no weekends or holidays. While on the medical-surgical units, the researcher was able to ask a CWOCN her opinion regarding consultation orders for low Braden scores. The CWOCN explained that complex wounds, ostomies, and incontinence related skin concerns took precedence over consultations for low Braden scores.

The CWOCN stated the following:

We attempt to see as many new consultations that we can every day, but we have to prioritize our care. A patient with a low Braden may have to wait for our personal assessments, but if we can't see them the day of referral, we at least try to provide a phone consultation with the assigned primary nurse. At least we know every patient has a nurse and a hospitalist who is able to assess the skin and implement care if we are unable.

The perception by the CWOCN that the patient with a low Braden score is having a complete head-to-toe assessment by one of the assigned care providers on each unit is inaccurate.

The misperception that care is being provided was validated in the following statements by a hospitalist:

6a.1: I presume that nursing is doing that and calling and consulting wound care nursing when they see an issue, but there are times when I'll ask the nurses to consult wound care nursing when they haven't.

G6a.8: I don't think physicians feel like they have the power to prevent. Maybe they think that it's up to the nurses and nurse aides and the wound care nurses to make sure they (pressure ulcers) don't happen.

Overall, key informants described a positive collaborative relationship with the person determined to be the expert when it came to skin assessment and pressure ulcer prevention, a CWOCN. However, many nurses were unaware of the CWOCN work schedule. With regard to collaboration with the CWOCNs, general informants believed that the responsibility of skin assessments and pressure ulcer prevention belonged to the assigned primary nurse. The belief that an ordered consultation to the CWOCN for a patient with a low Braden would be completed in a timely manner was inaccurate. Unfortunately, skin assessments that are not completed and documented within the first 24 hours of admission place the patient at risk for a hospital-acquired pressure ulcer.

*Culture care influences.* The second care pattern, the responsibility of skin assessments (Care pattern UIb), was influenced by kinship relationships within the social structure of the hospital system.

*Kinship relationships.* The network of relations among medical-surgical nurses, the CWOCNs, and other care providers creates a forum for decision-making. According to Casterle, Goethals, and Gastmans (2015), nurses rarely make care decisions alone, but use inter-personal networks. Nurses like to verify their own opinions with that of a colleague before making a final

decision. Such consultations are considered as positive and an opportunity to learn (Casterle, Goethals, & Gastmans, 2015).

However, according to the American Nurses Association Code of Ethics (2015), the nurse has the authority, accountability, and responsibility for their nursing practice. The nurse is able to make decisions and take action consistent with the obligation to promote health and to provide optimal care. If a CWOCN is unavailable, completing a skin assessment and implementing pressure ulcer prevention interventions should not be delayed. Every medical-surgical nurse has the responsibility and the ability to provide safe patient care as indicated, however, skin assessment and pressure ulcer prevention may not be deemed a priority. This belief is depicted beautifully in the following statement by a medical-surgical nurse manager:

G4b.17: I think we do not have a culture in which staff nurses have personal investments in the success of nursing sensitive indicators like skin.

### **Universal Culture Care Theme II**

Care of adults experiencing a HAPU was impacted by the medical-surgical nurse's inability to implement pressure ulcer prevention interventions influenced by the economical staffing patterns within the social structure of the hospital system. The culture care pattern was identified from participant observation, recurrent categorized descriptors, and raw data.

#### **Care pattern UII: Inability to implement pressure ulcer prevention interventions.**

Having adequate staff to implement pressure ulcer prevention interventions is imperative in preventing HAPU pressure ulcers in the at-risk patient on the acute care medical surgical unit (Black et al., 2011). Nurses were aware of the importance of repositioning patients at least every two hours, as well as providing skin care to patients who were incontinent, but reported that it

was difficult to do so when there was not enough staff. When key informants were asked what they believed to be the cause of HAPUs, they shared that:

K03.2: Sometimes, to be completely honest this isn't what we strive for, but staffing isn't as good as it should be. You try as hard as you can to get in there and turn every two hours, but sometimes it's not every two hours.

K03.18: With the current staffing issues it's not the easiest task to make sure that we're getting in there every two hours to change somebody. No matter how hard we try to work together since acuity is so high, staffing is so low, it's not easy to get in there every two hours and sometimes it doesn't happen.

K04.2: Aggressive turning and cleaning doesn't get done as often as it should because workers are so overwhelmed with not enough help. I don't think it's malicious by any means or lack of care, I think it's just the inability, the lack of staffing that we need.

When general informants were asked what they believed to be the cause of HAPUs, their answers concurred with those of the key informants. The following two statements were from newly-hired nursing assistants:

G1b.4: I would say short staffed, not having time to make sure you're going into somebody's room and turning them every two hours when you're having four or five, six people that need to be turned every two hours plus on top of everything else it can get missed.

G3c.9: I do the high risk patients usually only because I can't get to everybody and do everything and run back and forth and answer call lights. So in that situation I'm doing the people that have already been assessed or already at high risk, already have problems and I'm just making sure I'm trying to, it might not be two hours on the dot, but I am getting in there and making sure they're turned.

Both G1b and G3c shared that they were having difficulty "keeping up" with their care assignments, even though each had previously worked in long-term care facilities for several years.

While participating in day-to-day care endeavors on the medical-surgical units with the staff, the researcher became aware of the effects of an initiative to reduce catheter associated

urinary tract infections (CAUTI). CMS (2008) considers CAUTI a preventable complication and no longer reimburses for the extra costs of treatment. In November 2015, the hospital instituted the use of a nurse-driven urinary catheter removal protocol (Appendix O) to reduce the number of CAUTIs, but in doing so, increased the number of patient incontinent episodes. Although barrier creams were applied to protect perineal skin from the effects of moisture, both key and general informants reported that it was difficult to provide incontinence care in a timely manner:

K03.3: Since we have reduced the use of catheters, sometimes people just wet so heavily that even when you are in there every two hours they're just saturated.

K05.15: With the CAUTI initiative, they may be dry when you check them every two hours but five minutes later they could be incontinent again and you don't know it because you just checked them five minutes ago. So to prevent catheter infections we put our patients at risk for more skin breakdown.

G3c.14: It's been hard since the CAUTI initiative. Catheters come out pretty quick so people are incontinent more and so you just cleaned them up and they're soaked and wet.

The researcher noted that not only did nurses have difficulty in adequately managing incontinence episodes with prompt cleansing, but how the episodes interfered with other routine care regimes. At times, managing incontinent episodes delayed the every two hour turning and repositioning of patients who were at risk for pressure ulcers, as well as the documentation of the care provided.

*Culture care influences.* The care pattern, the inability to implement pressure ulcer prevention interventions, was influenced by the economical staffing patterns within the social structure of the hospital system.

*Economical staffing patterns.* During the researcher's time observing and participating with team members providing care to the medical-surgical patient, it was noted that nurses and nursing assistants had difficulty keeping up with two hour repositioning and incontinent care



efforts for every assigned patient. On one particular evening, the researcher arrived on a unit where only one nursing assistant was assigned to provide care for 29 patients, as a second nursing assistant had called-off and the central staffing department had not found a replacement. The nursing assistant was in tears and began to call co-workers on her own for help. The researcher was welcomed as an extra pair of hands to help care for the patients until the called-in nursing assistant arrived. This episode prompted the researcher to query those on the unit as to how the units are staffed.

The institution has a staffing department where administrative secretaries have the responsibility of ensuring that there is the correct nurse-to-patient ratio on each unit. None of the administrative secretaries have been or are currently nurses, but have paper guidelines as to how to staff the units. During a conversation in the break room, a registered nurse stated, “We used to send a report to the staffing office that listed the acuity of our patients and then we were staffed accordingly, but now we are staffed just by pure numbers.” The nurse did not know what the exact ratio of nurse and nurse assistant per patient was for her unit, but was quick to say that, “Whatever it is, it’s never enough.”

The researcher had always thought that the units were staffed according to patient acuity as well as the unit census, and was quite perplexed as to when and why this had changed. A manager from one of the medical-surgical units was willing to discuss the current staffing patterns. According to the manager, an individual in the quality department had recommended using benchmarked staffing ratios from an outside company. The manager confirmed that acuity is not taken into consideration when units are staffed. The manager reported that her average daily patient census was believed to be 24, so she could have 6 registered nurses and 4 nursing

assistants with 1 unit clerk on the day shift, and 5 registered nurses and 3 nursing assistants with 1 unit clerk on the evening shift. She stated that, “The problem with staffing per the recommendation of the benchmarked data is that there is not a right comparison group for my unit.” One medical-surgical unit at this facility is a combination unit with orthopedic and neurologic patients, and another unit accepts patients with intravenous cardiac drips. The outside company does not have “apple-to-apple” comparison benchmarked data for staffing. The manager believes that the recommended ratios are too low for her specific unit and that she has had both long-term and new hire employees resign because the workload was considered too great.

The researcher informed the manager of the episode where the nursing assistant made calls herself and was able to find someone willing to come in to help with staffing. The manager stated that when central staffing calls around to find extra staff, many of the nurses do not feel obligated to come in. “A lot of times I’ll do the calling myself and have better luck with finding somebody,” the manager said. She added that, “I’ll call until I find somebody. I don’t think the central staffing office has that much dedication or ownership to find somebody.”

During the summer and fall of 2015, it was noted by the researcher that the hospital was employing traveling nurses to supplement staffing. The manager explained that the hospital does have a float pool nurse, but only one, who is shared by all four medical-surgical units. The hospital has a few “relief” staff that can be called in when a unit is short staffed, but relief staff nurses are not obligated to work any specific hours. “Having the right amount of staff at the right time is a daily, if not hourly dilemma,” the manager said with a sigh, “and senior leadership does not want to hear about staffing because according to the benchmarks, we have the correct ratios.”

## Diversity Theme I

Care of adults experiencing a HAPU included diverse documentation regimes of pressure ulcer prevention interventions by the medical-surgical nurse influenced by care rationing practices and technical factors. Two culture care patterns for Diversity Theme I were identified from participant observation, recurrent categorized descriptors, and raw data. The two patterns underpinning Diversity Theme I were: DIa) documentation regimes were influenced by the nurse's sense of accountability towards direct patient care; and DIb) gaps in documentation were related to the lack of computerized charting.

**Care pattern DIa: Documentation regimes.** Not only is it crucial to implement pressure ulcer prevention interventions to prevent HAPUs, but it is imperative to have accurate and consistent documentation of that preventative care. It is the documentation that will help to determine if a HAPU was avoidable or unavoidable.

The researcher noted that although there were computers in every patient room, real-time documentation was rare as most nurses documented at the end of their shift. When key informants were asked when they document the care that they have provided, they stated that:

K02.138, 146: Sometimes it gets a little busy and sometimes you don't record things. I get distracted before charting. There are so many things you have to chart you have to delay that.

K04.115, 127: We're running and we have to tag team and move to the next patient. I can't say that we honestly document every single time. Documentation may not always reflect exactly what care was done.

K07.173: I usually chart out at the desk and I do all my patient charting at once.

A few of the key informants stated that they relied on patient care being documented by the nursing assistants, but that charting was inconsistent:

K02.72: Sometimes pressure ulcer prevention is given but not documented. Usually the nursing assistant documents the care, but sometimes the nursing assistant is not documenting care.

K07.158: I put the schedule for turning on the white board in the patient's room for the nursing assistants. When the nursing assistants do the turns, a lot of times they get charted on the white board in the room, not in computer.

Since key informants believed that the nursing assistants were doing the charting, the researcher asked a nursing assistant to explain her documentation regime and she stated that:

G3c.246: Sometimes when it's really busy it's just hard. Sometimes I'll write it down on paper and save it for the end of the day and then chart it all at once in the computer and then it's hard to remember what I did.

***Culture care influences.*** The first care pattern, documentation regimes (Care pattern DIa), were influenced by the nurse's sense of accountability towards direct patient care.

*Nurse's sense of accountability.* While working with the nurses and the nursing assistants, the researcher noted that during the provision of patient care, nurses were routinely distracted by calls on their voice communicators, a clip-on walkie-talkie device. The calls would notify the nurses of specific patient needs on the unit that could be of an urgent nature such as a patient in pain or in need of a bed pan. The communicator would also alert the nurses if a bed alarm was ringing, a patient call light was on, or a phone call from outside of the hospital was directed toward them. Because of this, the nurses and nurse assistants would quickly finish the current task in order to hurry to the next, and real-time documentation was rare. The researcher watched a nurse take scraps of paper out of her pocket in order to complete her documentation at the end of a busy 12-hour shift. The researcher asked the nurse why she had not charted during the shift and she stated, "When a patient needs me, documentation can wait. I have a responsibility to be sure my patients are safe. I'm accountable for my actions." However, nurses

are responsible for maintaining accurate documentation of the care they provide and are accountable if information is incomplete or inaccurate (Owen, 2005).

Blair and Smith (2012) reported that nurses' perceptions and attitudes towards documentation impact the quality of how and what they document. Although nurses consider documentation important for nursing professionalism, they consider it a burdensome secondary task that takes them away from direct patient care (Blair & Smith, 2012). It was this researcher's experience that the lack of documentation was caused, in part, by nurses who simply disregarded the importance of documentation in comparison to hands-on nursing care. However, while there is evidence that comprehensive documentation can take time away from direct patient care, in-depth documentation can help ensure patient safety (Committee on the Work Environment for Nurses and Patient Safety, 2004). This was observed by the researcher when a nursing assistant had to be stopped from turning a patient who had just been turned by the nurse because the nurse had not documented the event.

**Care pattern D1b: Gaps in documentation.** The researcher was curious as to how key and general informants liked documenting their care on a computer. There seemed to be mixed feelings about computerized charting with a few verbalizing frustration:

K02.143: Computers in rooms usually are not working properly

G1c.41: People just are clicking buttons without actually doing the care because it needs to be filled in and they have a little, you know, red dot that says you didn't do the skin assessment so instead of actually going and doing it they will, they just click.

G4b.159: I think there is a wide variety of documentation in terms of interventions because we have not gotten very deep into work regarding standardization of documentation expectations so in computerized charting there are lots of options for where you can put things. For example, so there are three different places you can put what their actual position is. There is a lot going on that the chart can't tell the story or maybe it can but it's hard to follow, it's hard to find.

One key informant viewed computerized charting as a “blessing and a curse” stating that:

K04.201: It’s helpful but not a human brain but it is nice to have reminders or a list of interventions. I do feel that electronic charting is taking away from the bedside and the nurse spends more time charting than actual time with the patient.

There was a key informant that had only done computerized charting, so to her it was helpful:

K03.75: I didn’t do a whole lot of care without a computer. I think the computer is helpful in that those best practice orders pop up and continue to pop up until signed.

However, a physician reported the following:

G6a.2: Computerized charting promotes just cut and paste and a default to a normal exam.

The realization that computerized charting defaulted to the normal exam prompted the researcher to explore how the nurses charted an event when clicking a check box on a doc flow sheet did not depict sufficient evidence of the exact care that was provided. Using the three theoretical predicted action and decision modes of culture care as a guide (Figure 5), the researcher asked questions about care regimes that are out of the norm. First the researcher asked the nurses if they had ever had a patient that could not be turned or refused pressure ulcer prevention care. Key informants identified the following:

K03.35: In hospice care, you’ve got families request that patients not be turned because it’s painful.

K05.45: Patients are not stable and you cannot turn them as you need to. An unstable patient may de-sat, or have a heart rate the jumps up when turned.

K07.65: I have also had orders from the doctor that say do not turn the patient

The researcher the asked the key informants how or where they would chart the inability to turn a patient at least every two hours as indicated for pressure ulcer prevention. It was explained that:

K03.58: There is a button that says refused by patient and I put a comment and say usually refused by a family member.

K05.74: You can say unable to turn due to patient condition. I put it in as a comment. I don't always write a full narrative note on all my patients.

K07.84: You can put that unable to turn due to physician order. I don't know that I ever really used narrative notes during school. I see local nursing student do write them. I never did.

Although the key informants felt they were providing accurate and complete documentation when care that was indicated could not be provided, general informants felt that this type of documentation was lacking. A nursing director shared the following:

G5a.13-14: They (nurses) don't document enough when patients refuse care. We've had a couple patients recently that have just been real difficult and they have refused to be turned, they have refused this and that and they just don't want to eat. I look in the charting and there's nothing there. I say you know what you guys if you don't say why we're not turning this patient, it's going to look like you just neglected that patient so no, I think it definitely could be stressed more and they could do better.

A resource nurse, who is a registered nurse with years of experience and is expected to provide bedside education to the medical-surgical nurses, shared the following experience:

G7a.106: I'll actually be in a room doing rounds and hear things being said like explaining the risks of not being turned and I see things being not done and then when I'm auditing charts and stuff I don't see any documentation. I tell the nurses that you educated them on the risks, but you didn't take credit for it so it's hard to follow the story of the patient when there are big gaps missing in the documentation.

A nurse manager described a patient scenario in which the family had requested that the patient be allowed to remain in a position of comfort. Because of this, the patient was not being turned. However, the documentation failed to note the family's request, making it appear that the patient had been neglected:

G7a.240: It's not charted in the narrative. I don't, I don't think they chart that piece and that's a piece where we're missing because a lot of times what actually will happen is the family will say we don't want you to turn them.

*Culture care influences.* The second care pattern, gaps in documentation (Care pattern D1b), were influenced by a lack of computerized charting.

*Lack of computerized charting.* Hospitals across the United States were expected to meet the meaningful use criteria with electronic health records, including electronic nursing documentation, in order to receive financial incentive payments by the year 2014 (CMS, 2016). Prior to the digital format, nurses used paper-based forms, narrative notes, and flow sheets to document pertinent patient information. The EMR systems also contain flow sheets to document patient information, as well as new features such as copy and paste, and structured drop-down menus not found in paper documents. The research study site converted to an EMR system in 2011.

Nursing documentation in EMR was expected to be a tool for quality patient care by providing transparency in clinical decision making, and by sharing information between healthcare workers that is important for patient safety and well-being (Kelley, Brandon, & Docherty, 2011). Kossman and Scheidenhelm (2008) reported that nurses believed electronic care plans helped them remember aspects of patient care, and helped them organize data. However, nurses found electronic documentation was not useful to communicate the patients' personal aspects of care (Kelley et al., 2011). With the use of drop-down menus that have predetermined choices built in, narrative charting by the nurse was no longer seen as an advantageous method of documenting patient information (Robles, 2009). At the research site, in order to write an explanatory narrative note, such as why a specific pressure ulcer prevention intervention was not implemented, the nurse was required to close-out of the doc flow sheet section in order to open the progress note section. Because nurses had to go in and out of



computer screens, very little narrative documentation was observed by the researcher.

Unfortunately, doc flow sheets and drop down menus may only tell half of the patient's story.

Although EMR documentation was touted as a time-saving measure (Kelley, Brandon, & Docherty, 2011), this researcher found it to be cumbersome and time consuming for the nurses.

The researcher observed nurses clicking through computer pages and templates to find and select the appropriate standardized boxes on specific doc flow sheets as seen in Appendices P and Q.

Certain selections would trigger an electronic pop-up that took the nurses away from their current documentation screen into another screen. This was seen frequently when a Braden score of 18 or less would prompt the BPA for the pressure ulcer prevention intervention order set (see Appendix M). When this occurred, further assessment documentation was blocked until specific interventions had been ordered. The researcher also noted that dual documentation was being performed when staff would use paper or the white board in the room to write down information, which then had to be transferred into a computer. There were also noted time delays in documentation related to computer issues such as: difficulty logging on, frozen screens, system slowness, and the unavailability of working computers.

Accurate and timely documentation not only provides a testament to care that is given (McGeehan, 2007), but it can also detail attempts to deliver care that were declined by the patient or explain why care was not provided due to safety concerns. This researcher is suggesting that the standard of accurate nursing documentation in this facility is suffering as a result of computerized checklist charting with very little narrative explanations of "out of the norm" type of care. One nursing manager wondered if it was the electronic documentation that has "thrown some of the nurse off" and asked out loud:

G7b.159: How can we make it easier for the nurse to do a wonderful assessment and plan of care and then not have to struggle in trying to document?

## **Diverse Theme II**

Care of adults experiencing a HAPU on an acute care medical-surgical unit included diverse multidisciplinary collaborative pressure ulcer prevention efforts influenced by kinship relationships within silo social structure of the hospital system. The culture care pattern for Diverse Theme II (DII), kinship relationships within the silo social structure of the hospital, was identified from participant observation, recurrent categorized descriptors, and raw data.

**Care pattern DII: Diverse multidisciplinary collaborative efforts.** Although nurses are expected to be able to prevent and manage pressure ulcers as a result of the education they receive regarding pressure ulcer risk assessments and pressure ulcer prevention interventions, the process of promoting skin integrity is complex and requires a supportive multidisciplinary team. There was awareness that a unified team effort was needed to prevent HAPUs, however, the expectation and support received from multidisciplinary team members varied tremendously. A nurse who had cared for a patient with a Stage III HAPU on the coccyx acknowledged the following:

K06.314 – I think the cause was multidisciplinary, someone dropped the ball on it and it kept bouncing down the street.

Three of the HAPUs identified during the research study developed in the coccyx area of patients who were determined to be at the “end-of-life” and were described as being “cachexic” and “malnourished.” The key informants who cared for these patients recognized the importance of having a registered dietician (RD) on the care team:

K04.165: Communication to team members happens during multidisciplinary rounds

(MDRs). We would like to have someone from all specialties for input like the physician, nutrition, and care management.

K06.81: I will consult the ET for a low Braden score and the dietician.

K07.374: I will consult for a dietician if a patient is refusing nutrition supplements.

An RD assigned to one of the medical-surgical units mentioned that the dietician department has received more consultations since the institution of “the BPA that triggers with a low Braden score. A dietician consult is listed as one of the choices” (see in Appendix M). The RD believed the following:

G4a.317: Nutrition plays a vital role in pressure ulcer prevention and treatment, and I think it really does take a holistic comprehensive approach.

However, the RD was frustrated with the lack of collaborative efforts in care:

G4a.102: We’ve always struggled with having the right documentation for intake. Some nurses and nurse aides do well with documentation, but other times there’s no documentation. A lot of times the percentage of food eaten gets lost in transit. They (hostesses) don’t document how much the patient is taking in on those meal slips and so, the meal slips are not as effective as we’d like them to be.

Only one key informant mentioned collaborating with a respiratory therapist (RT). This informant cared for the patient with a Stage IV HAPU on the ear caused by oxygen tubing. In this facility, the researcher was told that RTs are responsible for assessing all patients who have any type of oxygen therapy, including skin under tubing, elastic straps, and masks. An RT who had “rounded” on the patient with the HAPU on the ear stated:

G2b.8: I received very little education on pressure ulcer prevention in school. I do know that when a patient is a little skinny, so the skin is very thin, we’re concerned about this. We can place foam on the tubing or replace the hard tubing with soft.

However, the nurse caring for this patient noted:

K04a.310: The patient’s cannula was not the safety one, the soft one.

The patient with an unstageable HAPU on the heel had been cared for on the orthopedic unit. The nurse involved in the care for this patient knew that the “heel was in need of protection” and viewed:

K01.86: Communication of pressure ulcer risk and interventions between staff members as the most important intervention for prevention.

Unfortunately, the physical therapist (PT) who had cared for the same patient with the heel HAPU stated:

G01a74: No staff member has ever talked to me about a Braden score and we really do not have the staff to accommodate all the different MDRs on all the different floors. If the patient is nonfunctional, it’s really one of the main priorities to get them to unweight their bony prominences.

Although the PT made the comment about the importance of “unweighting bony prominences,” he also stated that:

G01a:257: If there are no wounds present and it’s just a strictly preventative thing, it doesn’t always happen, but if there are wounds there, for the patient’s comfort, we’d have those boots on if the heels are touching anything.

Two of the HAPUs were identified after surgical procedures had been performed in the operating room: a SDTI of the chin related to a lengthy procedure without repositioning, and an unstageable ulcer of the thigh related to a tight surgical dressing. Because of the uncommon nature and severity of these HAPUs, each key informant had reported what is known in the facility as a safety call-out (SCO). Each reported SCO is reviewed by the risk management team for a root cause analysis (RCA). The RCA involves input from any member of the team who had cared for the patient, and is followed-up with a plan to prevent the same occurrence from happening in the future. One would expect that operating personnel responsible for positioning the patient or dressing application would be aware of the two reported SCOs, but this was not the

case. When a certified registered nurse anesthetist was informed about the HAPUs that may have started in the operating room, he revealed that:

G3a.125: I am guessing they (pressure ulcers) show up several days later. It's not very often that we hear about them and that would be something that might need to be worked on between departments such as the surgical floor, post-op surgical floor, and the OR nursing coordinators, and pass some of the information back and forth between them. We very rarely hear about it.

A nurse circulator believed that the operating room staff does a "good job" making sure that patient's bony areas and skin are protected from pressure and was surprised to hear about the HAPUs related to surgical procedures:

G3b.161: No, I've never heard anything about that and I can't even imagine how that happened.

Asked if she would like to know about SCOs related to surgical procedures she stated:

G3b.190: Absolutely. I think that that's vital to prevention to know that something like that could happen. I never would have thought in my wildest dreams about that. I would love to know anything that I can do to not have somebody be hurt like that.

There was an expectation that care of the patient who was identified to be at high risk for pressure ulcers would have pressure ulcer prevention interventions as part of the plan of care, and that the plan of care would be discussed during the MDRs. However, when the researcher asked a physician if high risk patients were routinely presented in the MDRs, he replied:

G6a.189: I don't think on a consistent basis. Every floor is different and their struggling to figure out what things to put in the MDRs to make it efficient and effective.

*Culture care influences.* The care pattern, diverse multidisciplinary collaborative efforts (DII), was influenced by kinship relationships within silo social structures of the hospital system.

*Kinship relationships within silo social structures.* The delivery of evidence-based standards of care to maintain skin integrity is dependent on the input and close collaboration of

different members of the multidisciplinary team. This has been highlighted in a number of guidelines for pressure ulcer prevention and management by EPUAP and NPUAP (2009). Nurses are expected to be able to prevent and manage pressure ulcers, however, nurses require advice, knowledge, and cooperation of other health care professionals. Dietitians play an important role in the prevention of pressure ulcers, as they help to ensure that patients receive sufficient nutrition to overcome their illness and maintain their skin integrity. Physical therapists are not only supportive in assisting patients to become mobile, but are instrumental in proper positioning off bony prominences. At this facility, nurses relied on respiratory therapist to identify the potential for medical device related pressure ulcers from oxygen delivery systems. Despite this, the role that different members of the multidisciplinary team played in the prevention of pressure ulcers during this research study varied tremendously.

According to The Center for Modeling Optimal Outcomes (2009), each hospital department has different regulatory criteria and standards set by their respective professional organizations, separate clinical and quality metrics, and budgetary restrictions, and each is held accountable for patient care outcomes related to their sphere of influence. In essence, these “silos” think and act as if they were independent businesses. The result of this fragmentation and complexity was evident in how this hospital approached a patient safety situation as a special case instead of looking more holistically at the processes that led to that situation. The case in point involved the HAPU that developed on a patient’s chin after a prolonged surgical procedure. The event was reported to the risk management team by the identifying nurse on the medical-surgical unit and a root cause analysis of the event was completed. However, the final report was not shared with the surgical department in which the HAPU was believed to have originated. The

danger of remaining isolated within each individual department, referred to as a silo mentality, seems to impede a fully engaged multidisciplinary focus on reducing HAPUs and enhancing patient safety.

### Summary

Two universal and two diverse themes were generated using the ethnonursing method and were derived from medical-surgical nurses who cared for a patient with a HAPU (emic), as well as from health care professionals who had knowledge of HAPUs and pressure ulcer prevention care (etic). The four themes reflect the similarities and differences of culture care associated with adult patients experiencing a HAPU while on the acute care medical-surgical unit. Culture influences such as economic factors, kinship factors, social structure factors, technical factors, and the personal values, beliefs, and practices of the medical-surgical nurse were also presented (see Table 3).

Table 3. Findings of the Culture Care Themes

Theme	Pattern (s)	Social Structure Influences
Universal Theme I <i>Incomplete skin assessments</i>	UIa. completing a skin assessment was optional for the nurse	Priority setting practices
	UIb. completing the skin assessment was the responsibility of the CWOCN	Kinship factors

Table 3 (cont.)

Universal Theme II <i>Inability to implement pressure ulcer prevention interventions</i>	UII. staffing patterns made it difficult to provide care	Economic factors
Diverse Theme I: <i>Diverse documentation regimes of pressure ulcer prevention interventions</i>	DIIa. nurses' accountable for safe patient care before documentation	Care rationing practices
	DIIb. gaps in documentation were related to computerized charting	Technical factors
Divers Theme II: <i>Diverse multidisciplinary collaborative efforts</i>	DII. silo-type relationships	Social structure factors

### **Trustworthiness**

In this ethnonursing qualitative research, the truth and dependability of the themes and other findings were evaluated by using Leininger's (2006b) six criteria for evaluating qualitative research: (a) credibility; (b) confirmability; (c) meaning-in context; (d) recurrent patterning; (e) saturation; and (f) transferability. These six criteria are consistent with the most common criteria used to evaluate the trustworthiness of qualitative research: credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985). Leininger's six criteria are addressed in this section.

### **Credibility**

Credibility refers to the accuracy or believability of the findings that have been mutually established between the researcher and the informant (Leininger, 2006b). Throughout the study the researcher sought confirmation of findings through ongoing feedback from informants, reflection on observations, clarification of meanings, and interpretations from informants. These



confirmations were in the form of restatements, summarizations of clarifications during direct experiences with the nurses over time, and in subsequent interviews.

The “believability” was also established through prolonged engagement in the field. In this ethnonursing study, the researcher participated in nursing care on the medical-surgical units for a total of approximately 200 hours over 7 months, and observed, interviewed, and participated in the activities of the informants. This extensive immersion in the field enabled the researcher to document systematically nursing care values and caregiving practices of the informants, and to grasp the full context and multiple facets of the phenomena under study. The continuous engagement on the units facilitated frequent checks of findings and interpretations with informants, and enhanced the validation of findings against the daily and recurrent activities of the nurses.

### **Confirmability**

Confirmability refers to the repeated and documented evidence from observations and informant data (Leininger, 2006b). It includes objective as well as subjective data derived from repeated accounts of informants, repeated observations, or other ways which substantiate what had been heard, observed, or experienced. Leininger (2006b) suggests “mutual agreement” between researcher and informants and “data substantiation” as a means for assessing confirmability. In this study, data confirmation was attained by validation and verification of what was heard, observed, and experienced with informants. The ongoing reflection about the researcher’s part in the study, relationship to the participants, and effects of the research on the researcher were inherent in the OPR enabler and Leininger’s (2006b) four phases of ethnonursing data analysis guide. Data substantiation was inherent in the four phases of analysis,

which linked raw data (phase I) to categories or descriptors (phase II), categories and descriptors to the development of patterns (phase III), and finally, patterns to the synthesis of themes based on all the previous phases (phase IV). Through careful documentation in field notes and journals, as well as the use of the enablers, an audit trail was established.

### **Meaning-in-Context**

Meaning-in-context refers to data that have meaning or significance to the findings from the emic perspective. In this study, the care values and caregiving practices of the medical-surgical nurses were examined, explored, and analyzed not only in light of their world view, culture, and social structure, but also in light of the values and requirements of the hospital subculture and other environmental contexts. The discovered themes and other findings reflect the essence and interpretations of the environmental contexts, in addition to the world view, culture, and elements of the social structure. Informants were encouraged to provide agreement, clarification, or refutation of the findings based on their perspective.

### **Recurrent Patterning**

Recurrent patterning refers to the patterned reappearance or reoccurrence of events, expressions, experiences, or lifeways (Leininger, 2006b). Recognition of the patterns were facilitated by recordings and reviewing journal notes as well as through the use of the ethnonursing research enablers and the ethnonursing data analysis guide (Leininger, 2006b). Repeated experiences, expressions, events, or activities that reflect patterns of behavior were noted over time until the patterns became pervasive enough that saturation was confirmed. For example, the belief that skin assessments were not a priority by the medical-surgical nurses was derived from repeated attestations that completing a patient's skin assessment was not as

important as assessing the heart, lungs, and abdomen of the patient, and by personal observations of actual patient assessments that did not include head-to-toe examination of bony prominences.

### **Saturation**

Saturation means there is no further data or insights forthcoming from the informants of observed situations (Leininger, 2006b). Redundancy or the frequent repetition of information is the hallmark of saturation. Saturation is usually used to determine when to stop data collection (Glaser, 2001, 2011; Glaser and Strauss, 1967; Lincoln and Guba, 1985), however, saturation can also be an indication of the significance or magnitude of a phenomenon in qualitative research. The researcher continued to collect data using the first three phases of the ethnonursing data analysis guide (Leininger, 2006b) until there was a redundancy of information and informants contend they have no more to offer. For example, in this study the notion that “short staffing” presented an obstacle to documentation was pervasive, intense, and repeated by all of the key informants. The constant repetition indicated not only the exhaustiveness of the idea, but also its salience and noteworthiness.

### **Transferability**

Transferability refers to the extent to which findings from a study may be transferred, or used in other similar contexts, or linked to other literature (Leininger, 2006b). The responsibility of the researcher is to provide clear and adequate descriptions so that others who are interested in applying the research findings will have enough information to make decisions regarding its similarity with other situations and events. In this research, the ethnonursing description of the context, people, activities, and events provides the framework from which the themes and other findings from this study can be compared with similar circumstances and conditions. The

researcher followed the ethnonursing processes to obtain a full understanding of the HAPU event including the medical-surgical nurses' beliefs, values, and practices of care. Although qualitative research is not intended to produce generalizations (Leininger, 2006b), the in-depth knowledge obtained from this study assisted in establishing criterion for new research.

### **Summary**

The findings discovered in this ethnonursing study were presented and were related to the domain of inquiry: culture care beliefs, values, and practices of the acute care medical-surgical nurse caring for the patient who develops a HAPU. Using the ethnonursing method, two universal themes and two diverse themes were abstracted from informant descriptors and patterns (see Table 3, p. 97). Each theme was influenced by specific culture care factors such as: economic factors, kinship relationships, social structure factors, and technical factors. The chapter concluded with a discussion establishing the trustworthiness and methodological rigor of the study by using Leininger's (2006b) enablers. In the next chapter, the findings are discussed as they relate to previous literature, new contributions to nursing knowledge, and implications for clinical practice, nursing education, nursing administration, and future research.

## CHAPTER FIVE

### DISCUSSION

The Domain of Inquiry (DOI) for this study was undertaken to discover the culture care beliefs, values, and practices of medical-surgical nurses who cared for a patient with a HAPU in the context of an acute care hospital. This ethnonursing study was conceptualized within Leininger's (2006a, 2006b) theory of Culture Care Diversity and Universality because it addresses broad social structure features that provide substantive explanations of care from the nurse's perspective. To explore the phenomenon of unavoidable pressure ulcers, emic and etic cultural meanings, expressions, and patterns of care related to the implementation and documentation of pressure ulcer prevention were explored. Ethnonursing analysis yielded two universal care themes and two diverse care themes. In this chapter the themes are examined and discussed in accordance with current theoretical and empirical research. The chapter concludes with a discussion of the limitations and strengths of the study and implications for nursing practice, education, administration, and future research.

#### **Themes**

Engagement with key informants (acute care medical-surgical nurses who cared for a patient with a HAPU) and general informants (acute care providers who had knowledge of the medical-surgical patient with a HAPU) allowed for a comparative approach to knowledge discovery. Based upon the recurrent, observed, and expressed similarities and differences of culture care, two universal themes and two diverse themes were identified.

## **Universal Theme I**

Care of adults experiencing a HAPU included incomplete skin assessments by the medical-surgical nurse, influenced by priority setting practices and kinship relationships within the social structure of the hospital system. There was an overall belief that assessing the skin was at a lower priority than the evaluation of a patient's respiratory and cardiac status, and that assessing the patient's skin and bony prominences was the responsibility of the CWOCN. Because of these beliefs, two culture care patterns were identified: UIa) completion of skin assessments was optional influenced by the priority setting practices; and UIb) the responsibility of skin assessments was placed upon kinship relationships. These two culture care patterns have been described in the literature.

### **Completion of skin assessments optional influenced by priority setting practices.**

Gallant, Morin, St. Germain, and Dallaire (2010), in a descriptive correlational study exploring the relationship between nurses' level of knowledge of pressure ulcers and implementation of preventive care, found a wide discrepancy between what nurses know and what they put into practice. Gallant et al. (2010) reported that the initial assessment of the patient was carried out for less than 25% of the patients (n = 235), although 96.88% of the nurses (n = 256) had correctly answered the question related to the topic of assessment. The authors concluded that knowledge does not automatically translate into practice (Gallant et. al, 2010).

If nurses have the knowledge, why is it not translating into practice? In order to understand the variables affecting pressure ulcer prevention and care, a phenomenological qualitative study using in-depth individual interviews was conducted to describe hospital and community registered nurses' (n = 30) perceptions of pressure ulcer prevention (Athlin, Idvall,

Jernfalt, & Johansson, 2009). According to Athlin et al. (2009), pressure ulcer prevention had low status among registered nurses because they were more interested in direct care related to the patient's disease. Athlin et al. (2009) reported that registered nurses had adequate knowledge of prevention, but rarely incorporated prevention into their practice because pressure ulcer care was usually performed by licensed practical nurses. Samuriwo (2010) conducted a qualitative study to determine the value nurses (n = 16) placed on the prevention of pressure ulcers and concurred with Athlin et al (2009). Samuriwo (2010) found that nurses reported prevention as important, but often delegated this duty to less-qualified staff while they addressed care concerns they believed to be more urgent.

In reviewing the literature, there were limited quantitative studies exploring the concept of nurses' values and beliefs towards the completion of skin assessments related to pressure ulcer prevention. However, there were studies related to nurses' attitudes toward pressure ulcer prevention. It is believed that attitudes are the main impetus or motivation behind an individual's activities and performance, as attitudes assist in decision-making and setting a level of excellence (Petty & Cacioppo, 1996). According to Fishbein and Ajzen (2005), if a person holds a positive attitude toward an issue, this will increase the possibility of performing a supportive behavior related to that issue, and vice versa. Examining nurses' attitudes toward pressure ulcer prevention may help to explain the nurses' beliefs reported in this study that completing a skin assessment on admission was deemed optional.

Beeckman, Defloor, Demarré, Van Hecke, and Vanderwee (2010) designed and evaluated the psychometric properties of the Attitude toward Pressure ulcer Prevention (APuP) instrument. The factors were: attitude toward personal competency to prevent pressure ulcers,

priority of prevention, impact of pressure ulcers, personal responsibility in prevention, and confidence in the effectiveness of pressure ulcer prevention. The tool's validity was supported by content experts and known-groups technique, and the reliability was supported by internal consistency verified with subscale Cronbach's alphas of .75 to .82 (Beeckman et al., 2010). Using the APuP tool along with a knowledge test, Beeckman, Defloor, Schoonhoven, and Vanderwee (2011) examined 553 nurses and reported that knowledge of pressure ulcers was insufficient (mean score 49.6%); pressure ulcer education significantly increased knowledge ( $p = .002$ ), but knowledge scores were not correlated with performance of prevention ( $p = .198$ ). However, Beeckman et al. (2011) found that attitude scores were correlated positively with knowledge scores ( $p < .001$ ) and performance of adequate prevention ( $p = .016$ ). Beeckman et al. (2011) concluded that positive attitudes and adequate knowledge could be believed to reasonably translate into nurses' implementation of pressure ulcer preventative care.

**The responsibility of skin assessments was placed upon kinship relationships.** In this study, the nursing staff had the perception that the completion of admission skin assessments could be deferred to the CWOCN. However, the three CWOCNs cover three separate acute care facilities and prioritize complex wounds and new ostomate consultations before skin assessments. Kiely (2012), after a review of the facility practice patterns in a 121 bed inpatient acute care, also discovered that the wound care nurse was held responsible for patients' skin integrity, but access to the wound care specialist was limited and care was fragmented. Acknowledging the fragmentation, nursing administration set out to create a culture of nurse autonomy and accountability by establishing an evidence-based wound care program. Kiely (2012) found that initial education of nursing staff did not ensure implementation of preventative



practices, so wound staging and management cards were designed with related pressure ulcer prevention order sets. Nursing staff embraced the changes and preventative care was delivered in a more timely fashion decreasing the incidence rate of acute care pressure ulcer from 3.37% in October of 2010, to 0.67% in May of 2011 (Kiely, 2012).

Soban, Finley, and Miltner (2016) used comparative case methodology to identify key components of pressure ulcer prevention programs in a large, integrated health care system. The sample was comprised of 48 informants representing individuals who play key roles in pressure ulcer prevention from 6 participating hospitals. All 6 hospitals had access to wound care specialists who were noted to be the expert in the hospitals' pressure ulcer prevention activities. The wound care specialists were assigned to multiple care settings, which was a source of stress for the specialists and found to be insufficient by the nursing staff (Soban, Finely, and Miltner, 2016). However, Soban, Finely, and Miltner (2016) reported that facilities with lower pressure ulcer incidence rates (2.2% to 3.5%), had higher levels of wound care specialist staffing compared to hospitals with higher rates (6.7% to 8.9%). It should be noted that the role of the wound care specialist was policy development, leadership of pressure ulcer prevention committees, staff education, and performance monitoring (Soban, Finley, and Miltner, 2016).

### **Summary of Universal Theme I**

Medical-surgical nurses in acute care prioritized care according to specific patient disease diagnoses, not to the prevention of pressure ulcers. Preventive interventions, such as completing an initial skin assessment, were regarded as optional by the nurses and could be deferred to the CWOCN. However, skin assessments that are not completed and documented within the first 24 hours of a patient's admission place the patient at risk for a HAPU.

## Universal Theme II

Care of adults experiencing a HAPU was impacted by the medical-surgical nurse's inability to implement pressure ulcer prevention interventions, influenced by the economical staffing patterns within the social structure of the hospital system. The importance of the social structure factors of economics was confirmed for Universal Theme II. Economic statements such as "staffing isn't as good as it should be", "staffing is low", and "lack of staffing", were reported by the informants as the main reason for a HAPU. The economical staffing patterns resulted in "aggressive turning and cleaning not getting done as often as it should" and left the nursing staff feeling "overwhelmed" and in tears.

**Economical staffing patterns.** In this hospital, current staffing patterns for the acute care medical-surgical units were based solely on daily patient census. The acuity level of the patient was not taken into consideration for staffing the units. However, patient mortality and safety risk increase when nurse staffing levels and supporting structures are inadequate (Aiken, Clark, Sloane, Sochalski & Silber, 2002). According to Houser (2003), the ideal method of staffing would be flexible and based on expert nursing judgment that takes into consideration patient complexity and resources.

Pappas, Davidson, Woodard, Davis, and Welton (2015) developed the Patient Risk Assessment Profile to identify patients who were at a higher risk for adverse events, and reallocated nursing staff to mitigate the risk. In December 2011, a 30-bed surgical unit was selected to pilot the Patient Risk Assessment Profile for staffing. Four nurse-sensitive indicators: falls, catheter-associated urinary tract infections (CAUTI), central line-associated blood stream infections (CLABSI), and pressure ulcer prevalence (PUP) were measured pre- and post-

implementation on the unit using the Patient Risk Assessment Profile. The rates for all four nurse-sensitive indicators declined on the unit using the patient risk-adjusted staffing model. Pre-intervention data were from 2011 and post-intervention data from 2012-2014: fall rates decreased from a baseline of 3.44 to 1.35 per 1,000 patient days ( $p < .05$ ); CAUTI rates decreased from 2.72 to 2.15 per 1,000 patient days; CLABSI rates decreased from 1.18 to 0.38; and PUP decreased from 3.86 to 1.57 (Pappas et al., 2015). Incidental overtime decreased by 30% resulting from adequate time during the shift for nurses to complete their work (Pappas et al., 2015). Pappas et al. (2015) concluded that nurses were empowered and valued the fact that the patients' clinical condition and risk for complication was factored into staffing decision versus simply staffing to a ratio.

Cho, Chin, Kim and Hong (2016) analyzed data from 58 hospitals in South Korea to examine the relationships of nurse staffing level and work environment with adverse patient events. A multilevel ordinal logistic regression was employed to explore the relationships of nurse staffing level (number of patients assigned to a nurse) and work environment (Practice Environment Scale of the Nursing Work Index) with the three most commonly nurse-reported adverse events (administration of the wrong medication or dose to a patient, pressure ulcers, and injury from a fall after admission). A larger number of patients per nurse was significantly associated with higher incidence of administration of the wrong medication or dose (odds ratio [OR] = 1.01, 95% confidence interval [CI] = 1.007–1.016), pressure ulcer (OR = 1.01, 95% CI = 1.007–1.016), and patient falls with injury (OR = 1.02, 95% CI = 1.013–1.022). Cho et al. (2016) reported a significant positive relationship between higher nurse workload and patient adverse events after controlling for nurse, hospital, and patient characteristics. An increase of one patient

per nurse per shift was associated with a 1% increase in likelihood of administering the wrong medication or dose, a 1% increase in pressure ulcer, and a 2% increase in falls with injury (Cho et al., 2016).

### **Summary of Universal Theme II**

The lack of nursing staff, thus the lack of time, was viewed as an obstacle by the nurses in their ability to provide timely pressure ulcer prevention care. Being responsible for too many patients at one time meant that the nurses had limited time for pressure ulcer prevention implementation, despite personal ambitions and professional obligations. Research has reported that better patient-to-nurse staffing ratios have been significantly associated with lower rates of hospital mortality, hospital-acquired pressure ulcers, and adverse events (Aiken, Clark, Sloane, Sochalski & Silber, 2002; Cho, Chin, Kim & Hong, 2016; Pappas, Davidson, Woodard, Davis & Welton, 2015). Healthcare strategies and efforts to modify nurse staffing levels according to the patient census and patient acuity level are needed to improve the quality of care and patient outcomes (Pappas et al., 2015).

### **Diverse Theme I**

Care of adults experiencing a HAPU included diverse documentation regimes of pressure ulcer prevention interventions by the medical-surgical nurse, influenced by care rationing practices and technical factors within the social structure of the hospital system. Although nurses believed that the documentation of care was important, a higher value was placed on the direct care needs of the patient. Because of urgent patient care needs, computerized documentation was saved for the end of the day, and did not always reflect the exact care that was provided. There was a “love-hate relationship” with computerized documentation as nurses liked the pop-ups for

best practices, but recognized that drop-down menus lacked narrative explanations of why care may not have been provided due to unusual circumstances. There were differing documentation regimes related to pressure ulcer prevention implementation as some nurses wrote notes on paper or on the white board before documenting in the computer. Because of these practices, two culture care patterns were identified: DIa) documentation regimes were influenced by the nurse's sense of accountability towards direct patient care; and DIb) gaps in documentation were related to the lack of computerized charting. These two culture care patterns have been described in the literature.

**Documentation regimes were influenced by the nurse's sense of accountability.**

Nursing scope of practice involves a wide range of responsibilities that are implemented to ensure quality of care and patient safety. According to the American Nurses Association (2015), the registered nurse has the authority, accountability, and responsibility for nursing practice; makes the decisions; and takes action consistent with the obligation to promote health and to provide optimal care. However, there are times when nurses find it impossible to fulfill all nursing requirements and may choose to reduce, delay, or simply omit care (Kalisch, Landstrom, & Hinshaw, 2009). According to Schubert et al. (2008), rationing of nursing care exists when nurses are forced to withhold or fail to carry out a nursing task due to inadequate time, staffing, or skill mix. Rationing is influenced by the nurses' sense of autonomy and responsibility, as well as the amount of available time and resources, such as staff and skill mix (Kalisch et al., 2009). Examples of rationing of nursing care include delaying or omitting: surveillance activities, prevention interventions, education, or documentation (Schubert et al., 2009). During the present study, nurses rationed care when they felt forced to forgo documentation in order to attend to the

immediate direct care needs of the patient.

After interviewing 23 nurses, Papastavrou, Andreou, and Vryonides (2014) reported that nurses rarely, if ever, omitted or delayed responding to the patients' most vital medical needs when rationing nursing care. In their study, the factors central to rationing were related to the limited number of staff and staff misuse (Papastavrou et al., 2014). Papastavrou et al. (2014) concluded that when nurses ration care, they tend to give priority to medical or technical interventions.

Jones (2015) used a 31-item survey to analyze the implicit rationing of nursing care in the state of Texas. A total of 226 nurses were included in the final sample analysis. Jones (2015) reported that rationing was reported by 98% of the respondents with 97% rationing multiple activities, with individual item mean scores ranging from 0.44 (less than rarely) to 1.72 (more than rarely). According to Jones (2015), the top five care rationing activities were: providing timely responses to patient's needs or requests (1.72), reviewing documentation by the care team (1.55), providing routine hygiene (1.52), documenting nursing interventions and care (1.50), and providing patient teaching (1.48). Documentation placed fourth in the sequence of the top 25 rations reported (Jones, 2015). Monitoring physiological status (0.96), changing dressings (0.84), providing wound care (0.80), administering medications (0.62%), and administering enteral nutrition (0.44), were the lowest reported rationing activities of the top 25 reported (Jones, 2015). Jones (2015) concluded that medical-surgical nurses favored the completion of activities that addressed direct and immediate physiological health needs.

**Gaps in documentation were related to the lack of computerized charting.** The purpose of nursing documentation is to record both the care provided by nurses to their patients,

and the patients' responses. The current standard of care is the nursing process; therefore, the steps in the nursing process need to be evident in the nursing documentation. This standard should be upheld whether nurses are documenting in the EMR or on paper. However, if given a choice between providing high quality care and quality documentation with an inefficient EMR system, the nursing priority is to provide the care and minimize documentation (Lavin, Harper, & Barr, 2015).

EMR systems are similar to paper-based documents in that both contain flow sheets to gather patient information. However, EMR systems introduced new features such as copy and paste, electronic interfaces, and structured drop down menus. While these features are seen as time savers, they may alter the processes by which nurses assess and critically think about patient status and care (Kelley, Brandon, & Docherty, 2011). From June 2010 to September 2011, Cutugno, Hozak, Fitzsimmons, and Ertogan (2015) reviewed preventative nursing documentation in the EMR of 100 patients and found that documentation in flow sheets served as a reminder to the nurses as to what needed to be assessed and documented. However, when documentation of measures was not part of a flow sheet, compliance would have required nurses to write narrative notes instead of just checking off the measures performed. Scripting narrative notes added considerable time and compliance was low (Cutugno et al., 2015). Nevertheless, narrative notes are important when documenting patient information that is not included within the check box lists in the EMR. For example, if a patient refuses to be turned every two hours to prevent a pressure ulcer, a narrative note should be written and contain the patient's wishes, any education provided, and the patient's understanding of the risks involved. Spoerner (2009) reported that narrative documentation expresses why an action or inaction was chosen and serves

as a communication tool for other nurses and ancillary departments caring for the same patient. However, narrative documentation also protects the writer from liability and can portray critical thinking in a way that standardized check boxes do not (Spoerner, 2009).

A well-constructed EMR should reflect accurately how nurses think (assess), arrive at clinical judgments (diagnose), identify outcomes, plan, intervene and evaluate care (Lang, 2008). However, direct care nurses reported that EMR issues such as: the rigidity in the number of available options for entering nursing data; a lack of pertinent patient information presented in a readily accessible and comprehensible manner to support critical decision making; over-dependence on the checklist quality of nursing documentation; and the relatively little attention given to diagnostic-specific interventions and their evaluations affected the quality of their charting (Lavin, Harper, & Barr, 2015). According to Lavin et al. (2015), issues related to EMR charting may not be the fault of the computerized system because human reasoning is needed to make appropriate clinical judgements, act upon them competently, and document clearly.

### **Summary of Diverse Theme I**

Rationing of nursing care and nursing care omissions are two terms used synonymously in the nursing literature. According to Papastavrou, Andreou, and Vryonides (2014), rationing of nursing care may be influenced by factors within the care environment such as the demands for patient care, resource allocation, and professional relationships. However, the decision to prioritize or ration care is greatly influenced by the nurses' personal attitudes, values, and beliefs about nursing accountability and responsibilities (Papastavrou et al., 2014). Unfortunately, the consequences of rationing care can be extensive in terms of patient outcomes. For example, if



pressure ulcer prevention care was implemented but not documented, it may be impossible to determine whether a HAPU was avoidable or unavoidable, thus a hospital cost.

Why is accurate and complete documentation important when determining a HAPU as avoidable or unavoidable? According to the NPUAP (2010), an unavoidable HAPU can be determined only if: (1) the patient's clinical condition and pressure ulcer risk was evaluated; (2) appropriate pressure ulcer interventions related to the risks were implemented; (3) prevention interventions were monitored and evaluated for effectiveness; and (4) the prevention interventions were revised when deemed necessary. However, Pittman et al. (2016), while developing an instrument to identify avoidable versus unavoidable HAPUs in the acute care setting, recognized that the NPUAP definitions were conceptual and not operational. Therefore, Pittman et al. (2016) developed four operational definitions for the Indiana University Health Pressure Ulcer Prevention Inventory (PUPI) instrument: (1) completion of a history and physical assessment, pressure ulcer risk assessment upon admission and according to organizational policy, and skin assessment upon admission; (2) determining and implementing interventions consistent with individual's needs, goals, and recognized standards of practice based on the Braden subscale (sensory perception, moisture, activity, mobility, nutrition, and friction/shear) scores; (3) monitoring and evaluating the effects of the interventions based on completion of a skin assessment during every shift; and (4) revision of the interventions as appropriate defined by Braden subscales. During phase 1 of the study, the overall content validity index was 0.99 and interrater reliability between raters ( $k = 1.0$ ;  $p = .025$ ) was acceptable (Pittman et al., 2016). In a retrospective study using the PUPI, 12 of 31 hospitalized patients with HAPUs were determined to be unavoidable (Pittman et al., 2016). For the HAPU to be considered unavoidable, it was

imperative that 100% of the specific pressure ulcer prevention interventions or supporting documentation be present as listed in the operational definition.

### **Diverse Theme II**

Care of adults experiencing a HAPU on an acute care medical-surgical unit included diverse multidisciplinary collaborative pressure ulcer prevention efforts, influenced by silo social structures within the hospital system. The importance of collaborative relationships was evident in the following statement by a medical-surgical nurse: “Communication of pressure ulcer risk and interventions between staff members is the most important intervention for prevention.” However, there was a lack of pressure ulcer prevention communication between the medical-surgical nurses, nursing assistants, dieticians, respiratory therapists, physical therapists, operating room staff, CWOCNs, and physicians as depicted in the following statement pertaining to a HAPU: “I think the cause was multidisciplinary, someone dropped the ball on it and it kept bouncing down the street.” It was also noted that two HAPU safety callouts identified on the medical-surgical units were not shared with related known causative staff from the operating room. While there was awareness that pressure ulcer prevention requires collaborative multidisciplinary involvement, healthcare professionals continue to work within their perspective professional silos (Mitchell, Boyle, Parker, Giles, Chiang, & Joyce, 2015).

**Silo social structures of the hospital system.** According to Hajek (2013), healthcare is composed of a host of special interest groups whose members have their own specialized academic preparation, social system, and approach to the work they do. Samuriwo (2012) interviewed 16 nurses questioning the value they placed on pressure ulcer prevention and their perceptions of the role of the multidisciplinary team in the maintenance of skin integrity.

Samuriwo (2012) reported that the roles of team members varied tremendously: PTs rarely assisted with pressure relief repositioning; physicians were mostly interested in skin integrity only after the development of a HAPU; and wound care experts had limited time to educate staff nurses about skin assessment and pressure ulcer prevention interventions. Samuriwo (2012) concluded that nurses should be more proactive in seeking input and support from the multidisciplinary team. However, commitment and interest by the entire healthcare team is an important factor in preventing adverse events within the hospital system (Hajek, 2013).

It took cooperation and communication between team members to ensure success of a performance improvement project to increase nursing compliance with skin assessments. Revello and Fields (2012) reported that using skin care champions to facilitate communication amongst team members was fundamental to the success of the project. Skin champions rounded with staff nurses twice a week and if pressure ulcers were identified, the staff nurse was counseled. If a pressure ulcer was not documented or incorrectly staged during the admission assessment, the issue was presented at a staff meeting. Occupational therapists and physical therapists were included in skin rounds and educated on how to perform skin assessments. Nursing assistants were encouraged to report excessive moisture from incontinence, perspiration, or wound drainage. Nursing assistants were also trained to document the patient's hydration and dietary intake, as well as how to use skin care products. The managers supported the project and patient outcome data were shared with the staff. By including multidisciplinary team members as active participants in pressure ulcer prevention, there was a zero incidence rate for HAPU from December 2008 to March 2010 (Revello & Fields, 2012).

The patient-safety literature emphasizes the importance of interprofessional or

collaborative approaches to learning and the delivery of patient-safety education (Horsburgh, Merry, & Seddon, 2005; Page, 2004). Wakefield, Carlisle, Hall and Attree (2008) explored the efficacy of a 3-day RCA blended learning program which was given to a total of 18 key organizational stakeholders from acute care, mental health care, and primary care located in England. Participant's reported that interprofessional learning allowed them to increase their understanding of each other's roles, which led to increased cooperation, collaboration, and increased confidence (Wakefield et al., 2008). The interprofessional learning also created an environment where the group norm was challenged and generated an acceptable environment to change practice (Wakefield et al., 2008).

### **Summary of Diverse Theme II**

Inconsistencies in treatment approaches and varied outcomes clearly indicate a lack of cohesion and collaboration within this hospital system. Multidisciplinary collaborative teams are needed to develop standardized protocols to promote skin integrity and improve quality care (Strayer & Martucci, 1997). Each staff member has unique strengths, education, and expertise with the potential to coalesce into a dynamic and focused pressure ulcer prevention team. The benefits of teamwork to produce positive clinical outcomes have been recognized, unfortunately multidisciplinary teamwork is far more difficult to achieve than it may seem (Horsburgh, Merry, & Seddon, 2005; Page, 2004). The challenge for an organization is to transform, create, cultivate, and maintain a culture of interprofessional cohesion and collaboration. Collaborative efforts are needed to develop sustainable processes that incorporate strategies for preventing pressure ulcers, assessing and documenting alterations in skin integrity, selecting and initiating treatment, and evaluating outcomes (AHRQ, 2011).

### **Unique Finding**

The findings in this study reflect the values, beliefs, and practices of the medical-surgical nurse who has cared for a patient with a HAPU. Four themes were discovered: (1) incomplete skin assessments were related to the nurse's priority setting practices and kinship relationships; (2) the inability to implement pressure ulcer prevention interventions was influenced by economical staffing patterns; (3) documentation regimes were influenced by rationing practices and computerized charting; and (4) multidisciplinary collaborative efforts were influenced by a silo social structure within the hospital system. However, surprisingly, participants did not recognize the importance of documenting unusual care occurrences somewhere within the patient record. This researcher used more in-depth questioning guided by the Action and Decision Modes of Culture Care to ascertain that staff were deficient in documenting any type of explanation when patients refused care or if a patient's condition prevented the implementation pressure ulcer prevention interventions (Leininger, 2006b). If care was not part of a doc flow sheet or in a drop down menu, it simply was not documented or acknowledged. Although participants believed that not all pressure ulcers were avoidable, the awareness that narrative explanations were needed to determine unavailability had not yet been realized.

### **Limitations**

These findings were discovered based on the emic and etic cultural meanings, expressions, and patterns of care related to the implementation and documentation of pressure ulcer prevention of the medical-surgical patient with a HAPU within a midwest regional medical center. The use of a single hospital system limits the generalizability of the findings to other settings, and should be interpreted with care. Despite this, however, the study does provide

unique insight into pressure ulcer prevention and documentation practices by medical-surgical nurses within an acute care setting.

### **Strengths**

Ethnographic methodology is useful in evaluating or eliciting information on a special topic or shared experience (Richards & Morse, 2007). It is of particular value to nurse researchers whose focus of study is a distinct issue or situation within a specific context (Roper & Shapira, 2000). This ethnurse-researcher, as a coparticipant with informants, was able to better understand the complexities surrounding pressure ulcer prevention and documentation from the participants' perspectives. This has contributed to the development of knowledge relevant to nursing and it is clear that additional research on pressure ulcer prevention and documentation is needed.

### **Implications for Nursing Practice**

Nurses have long been concerned with the prevention of pressure ulcers and evidence-based practice guidelines have been developed to guide pressure ulcer prevention practices (EPUAP & NPUAP, 2009; NPUAP 2010). Yet despite these concerns, the results from this study show that admission skin assessments were not a nursing priority and, due to rationing practices, documentation of pressure ulcer prevention was nonexistent or incomplete. However, if a pressure ulcer is not identified within the first 24 hours of admission, it is determined to be hospital-acquired, and the hospital is at risk for nonpayment of the condition (CMS, 2007). Therefore, nurses should recognize their role and accept the responsibility of completing and documenting an admission skin assessment. Nurses should also recognize the importance of accurate and timely documentation of the implementation of evidence-based pressure ulcer

prevention interventions or provide an explanation of why such interventions were contraindicated. Without accurate and timely documentation, the unavoidability of a HAPU cannot be determined, and nonpayment for hospital-acquired condition may be executed (NPUAP, 2010). Nurses should be more vigilant about including evidence-based practice guidelines into their routine care regimes.

### **Implications for Nursing Education**

Unfortunately, a nurse's knowledge of pressure ulcer prevention does not always translate into practice (Beeckman, Defloor, Demarré, Van Hecke, & Vanderwee, 2010). However, having a positive attitude toward pressure ulcer prevention with adequate knowledge increases the likelihood that a behavior will be performed (Beeckman et al., 2010; Fishbein & Ajzen, 2005). Factors included in the Attitude toward Pressure ulcer Prevention (APuP) instrument included feelings of personal competency to prevent pressure ulcers and confidence in the effectiveness of pressure ulcer prevention (Beeckman et al., 2010).

The education of how to document nursing assessments and implement patient care begins in nursing school. It is essential for nurse educators to possess basic pressure ulcer knowledge if they are to effectively educate future nurses regarding the importance of the documentation of skin assessments, as well as the implementation and documentation of pressure ulcer prevention interventions. It should be noted that because of regulatory initiatives mandating electronic documentation, the instruction and use of computerized charting begins in nursing school. Because unusual occurrences are not part of computer checklists or drop down menus, nursing students also need to be educated on how to write a narrative note if a pressure ulcer prevention intervention was refused by the patient or determined to be harmful for the patient.

The acute care medical-surgical nurses in this study believed documentation of care was important, but placed a higher value on direct patient care needs. They also had the perception that admission skin assessments could be deferred to the CWOCN. However, the CWOCNs prioritized complex wounds and new ostomate consultations above skin assessments. Although pressure ulcer prevention is initially taught in nursing schools, reinforcement of how to complete a head-to-toe skin assessment, implement pressure ulcer prevention interventions, and document assessments and care in the EMR should be part of nursing new hire orientation, as well as a yearly nursing competency. CWOCNs could be used as mentors and educators to develop the medical-surgical nurses' sense of autonomy and accountability towards pressure ulcer prevention and documentation. The importance of learning how to complete a thorough skin assessment and then document the assessment accurately in the EMR by the known expert can be a powerful influence on the sustainability of the nursing action (Soban, Finely, & Miltner, 2016).

### **Implications for Nursing Administration**

Nurses viewed the inadequate number of nursing staff as the reason for a lack of timely pressure ulcer prevention implementation and documentation, thus the cause of HAPUs. Nurses felt “overwhelmed” and were in tears as a result of not having enough staff to provide care. The current staffing patterns for the medical-surgical units were based on patient census and not on the patient acuity level. Research has shown that inadequate nurse-to-patient staffing ratios encourage rationing of nursing care, which cultivates an environment that does not promote timely pressure ulcer prevention implementation or point-of-care documentation (Papastavrou, Andreou, & Vryonides, 2014). By factoring in the patient's clinical condition and risk for complications when staffing the units, instead of using a simple staffing ratio, pressure ulcer



prevalence may decrease and nurses will feel empowered and valued (Pappas, Davidson, Woodard, Davis & Welton, 2015). With timely pressure ulcer prevention implemented and accurate documentation of the care, a HAPU could be determined as unavoidable, thus not a hospital cost.

Even though nurses have been educated in the assessment, interventions, and documentation of pressure ulcer prevention, it is essential that the organization understand that pressure ulcer prevention is a multidisciplinary responsibility. If a patient develops a HAPU, all departments who had contact with the patient would participate in the root cause analysis. The outcome of the RCA would be shared with all staff within each department to facilitate on-going multidisciplinary collaboration. Collaborative efforts are needed to develop sustainable processes.

The challenge for an organization is to transform, create, cultivate, and maintain a culture of interprofessional cohesion and collaboration. By using CWOCNs as educators and mentors throughout the organization, a culture of prevention, not crisis intervention, could be developed. A pressure ulcer prevention organizational culture would include dedicated educational time in a classroom, on-line, and in clinical contexts. Interventions on how to prevent pressure ulcers would be known by health care providers in every department and begin upon admission, no matter the patient's point of entry. This would mean emergency staff, surgery staff, radiology staff, and so on, would all know specific pressure ulcer prevention intervention regimes related to the care provided in their departments.

### **Recommendations for Future Research**

This ethnonursing research focused on the culture care beliefs, values, and practices of medical-surgical nurses who cared for a patient with a HAPU in the context of an acute care hospital. It was discovered that the implementation and documentation of pressure ulcer prevention was inconsistent, making it difficult to identify a HAPU as unavoidable. Based on the discoveries of this ethnographic study, future research studies are recommended. A qualitative study of high performing medical-surgical nurses, such as those who routinely complete admission skin assessments and have consistent point-of-care documentation, could reveal best practices for pressure ulcer prevention. Additional studies that explore the Attitude toward Pressure ulcer Prevention (APuP), nursing knowledge, and the inclusion of skin assessment and documentation as nursing best practice need to be conducted. Staff-to-patient ratio studies need to be conducted that not only consider mitigating risk, but the effect on point-of-care documentation. Future studies describing nurses' knowledge of narrative documentation for information not found in the EMR should be conducted. Finally, additional research is needed to explore the effects of multidisciplinary collaborative efforts on pressure ulcer prevention implementation and documentation.

### **Conclusion**

Unavoidable pressure ulcers do occur despite the provision of evidence-based prevention and treatment interventions (Edsberg, Langemo, Beharestani, Posthauer, & Goldberg, 2014). However, an unavoidable HAPU cannot be determined without accurate nursing documentation of the implementation of pressure ulcer prevention interventions or any unusual circumstance that prevents the implementation of the interventions for patients at risk. This ethnonursing study

has added new knowledge about factors that affect the implementation and documentation of pressure ulcer prevention interventions by medical-surgical nurses in the acute care setting.

The findings highlighted the necessity to strengthen the value placed on pressure ulcer prevention implementation and documentation among nurses, as well as the need to preserve their commitment and increase their knowledge in this area. The study also highlighted the need to improve communication and collaboration among all healthcare personnel involved in the care of the high risk patient. To deepen the understanding about nurse-related factors involved in the prevention of pressure ulcers, understanding the organizational culture was required.

Quality nurse decision making is an essential component of good clinical practice. To understand and improve clinical decision making, it is imperative that, in addition to understanding the nurses' culture care beliefs, values, and practices, contextual factors are taken into account. A broad perspective needs to be adopted that considers the factors associated with the nurses' decision-making attributes, as well as the influences of the organizational culture. This ethnonursing researcher discovered that economic staffing patterns encouraged rationing of care related to pressure ulcer prevention and documentation. Over time, these behaviors became habitual and created what nurses accepted as the norm. However, due to the evolving regulatory guidelines and the ongoing demand for providing high quality care, health care organizations need to understand the nurses' perceived barriers towards pressure ulcer prevention implementation and documentation. This understanding will enable organizations to develop strategies to increase nursing accountability and improve documentation. With this change, determining if a HAPU was avoidable or unavoidable could be accomplished.

APPENDIX A

PERMISSION TO USE CELLULAR RESPONSE TO PRESSURE

From: "Catherine Clarey-Sanford"  
To: bapieper@comcast.net  
Sent: Sunday, September 7, 2014 6:36:56 PM  
Subject: permission to use mechanical forces

Dear Dr. Pieper,

I am a PhD student at Loyola University Chicago and am in the proposal phase of my dissertation (Chapter 1, 2, and 3). I would like permission to use your figure as titled below:  
Adapted from Pieper, B. (2000). Mechanical forces: Pressure, shear, and friction. In R.A. Bryant, (Ed.), Acute & chronic wounds: Nursing management, p. 236.

I am going to do an Ethnonursing Study on unavoidable pressure ulcers.  
I will be observing and interviewing nurses in acute care on medical-surgical units.

Thank you for your time and consideration.  
Catherine Clarey-Sanford, MSN, RN, CWOCN  
269-369-8585  
cmcsanford@gmail.com

From: bapieper@comcast.net  
Sent: Monday, September 08, 2014 2:07 PM  
To: Clarey-Sanford, Catherine  
Subject: Re: permission to use mechanical forces

Hi Catherine,

I am without power and internet for 4 days. Found a computer to use today! I cannot remember the figure (book is at home) but if it is a chapter I wrote, by all means use it. I look forward to learning more about your research. Doctoral students are shining stars and we need more.

Best wishes with your work.

Barb

APPENDIX B  
PERMISSION TO USE FACTORS CONTRIBUTING TO THE DEVELOPMENT OF  
PRESSURE ULCERS

From: Clarey-Sanford, Catherine  
Sent: Sunday, September 07, 2014 5:52 PM  
To: Bergstrom, Nancy  
Subject: Factors contributing to the development of pressure ulcers

Dear Dr. Bergstrom,

I am a PhD student at Loyola University Chicago and am in the proposal phase of my dissertation (Chapter 1, 2, and 3). I would like permission to use your figure as below: Adapted from Braden, B. & Bergstrom, N. (1987). A conceptual schema for the study of the etiology of pressure sores. *Rehabilitation Nursing*, 12(1), p. 8.

Thank you for your time and consideration.  
Catherine Clarey-Sanford, MSN, RN, CWOCN

On Sep 8, 2014, at 10:49 AM, "Bergstrom, Nancy" <Nancy.Bergstrom@uth.tmc.edu> wrote:  
Just one follow up question. What change did you make to the figure below? The reference says "adapted" from?  
Nancy Bergstrom, PhD, RN, FAAN

From: Clarey-Sanford, Catherine  
Sent: Monday, September 08, 2014 10:15 AM  
To: Bergstrom, Nancy  
Subject: Re: Factors contributing to the development of pressure ulcers  
No changes. It is exactly as shown

From: Bergstrom, Nancy [mailto:Nancy.Bergstrom@uth.tmc.edu]  
Sent: Monday, September 08, 2014 12:38 PM  
To: Clarey-Sanford,  
So, the word adapted isn't necessary. Thanks for clarifying.

From: Clarey-Sanford, Catherine  
Sent: Monday, September 08, 2014 11:38 AM  
To: Bergstrom, Nancy  
Thank you very much. I will remove adapted. Sincerely, Catherine

From: Bergstrom, Nancy <Nancy.Bergstrom@uth.tmc.edu>  
Sent: Monday, September 08, 2014 12:39 PM  
To: Clarey-Sanford, Catherine  
OK. Let me know what you learn.  
Nancy Bergstrom, PhD, RN, FAAN, Theodore J. and Mary E. Trumble Professor of Aging Research, Associate Dean for Research, Center on Aging | Center for Nursing Research|6901 Bertner Avenue| 5.545 | Houston, TX 77030, 713 500 9920 tel | 713 500 0269 fax  
Nancy.Bergstrom@uth.tmc.edu, www.son.uth.tmc.edu

APPENDIX C  
FLYER FOR RECRUITMENT OF PARTICIPANTS





Title: Understanding Hospital-Acquired Pressure Ulcers

Purpose: To explore and understand, among acute care medical-surgical nurses, the culture care beliefs, values, and practices regarding pressure ulcer prevention and documentation.

Eligibility Criteria: If you are an RN or a health care professional on a medical-surgical unit and have cared for a patient who had a hospital-acquired pressure ulcer within the last 30 days.

Study Description: A qualitative ethnographic research method will be used. Data will be collected using telephone or face-to-face interviews. These interviews will be scheduled based upon your convenience, including time and location. Confidentiality will be maintained.

Enrollment and Contact Information:

Catherine Clarey-Sanford, RN, PhD Student  
Phone: 269-369-8585 (private cell phone – leave a message)  
Email: cclareysanford@luc.edu

As a thank you for your participation a \$10.00 gift card will be provided

APPENDIX D

PERMISSION FROM DR. EILEEN WILLITS, VP OF PATIENT CARE SERVICES & CHIEF  
NURSING OFFICER

On Nov 25, 2014, at 5:23 PM

I am comfortable and support this approach to your thesis. Eileen Willits  
Sent from my iPad

On Nov 24, 2014, at 4:56 PM, Clarey-Sanford, Catherine

Dear Dr. Willits,

I am in the process of submitting the first three chapters of my dissertation known as the proposal to Loyola University Chicago. This research will focus on nursing care of the patient with a hospital-acquired pressure ulcer (HAPU) as I continue to understand the phenomenon of unavoidable pressure ulcers. There are two areas that were of concern to my chairperson, Dr. Lee Schmidt, Loyola University Chicago.

1. Using Leininger's Ethnonursing Method, a portion of my research is through observation and participation. Dr. Schmidt suggested that I do this portion as a peer and not in the WOCN role. Because I do not want to change the culture on the units, I do not want to ask each nurse for permission. Therefore, as the Nurse Chief Officer, I am asking for your permission to observe and participate as a staff nurse on the medical-surgical units. I will wear the RN scrub colors and a badge that identifies me as a Registered Nurse.
2. During my observation and participation on the units, I may become aware of patient safety issues related to my WOCN expertise. Dr. Schmidt has asked that I have a plan in place to intercede in a confidential manner to ensure that the culture on the unit would not be disturbed. I would like your permission to arrange with the Nurse Managers a plan for an urgent confidential reporting system of any patient safety concern.

**If you have any questions or concerns please feel free to contact me via email or cell phone: 269-369-8585.**

**If you are willing to grant permission, a reply to this email will suffice.**

Sincerely, Catherine

*Catherine Clarey-Sanford, MSN, RN, CWOCN*

269-369-8585

cmcsanford@gmail.com

APPENDIX E

PERMISSION TO USE LEININGER'S ENABLERS

From: <Clarey-Sanford>, Catherine  
 Date: Monday, September 29, 2014 at 1:12 PM  
 To: John Vanderlaan <jovander@umflint.edu<mailto:jovander@umflint.edu>>  
 Subject: Permission to use

Dear Dr. Vanderlaan,

I am a PhD student at Loyola University Chicago and am in the proposal phase of my dissertation (Chapters 1, 2, and 3). I am going to do an Ethnonursing Study on unavoidable pressure ulcers. I will be observing and interviewing nurses in acute care on medical-surgical units. I would like permission to use the Trusted Friend Enabler and the Sunrise Enabler. I have also based my questions from the Sunrise Enabler as well as Decision Modes of Care (please see attached – Appendices H and I).

Thank you for your time and consideration.  
 Catherine Clarey-Sanford, MSN, RN, CWOCN  
 269-369-8585  
 cmcsanford@gmail.com

From: Vanderlaan, John <jovander@umflint.edu>  
 Sent: Monday, September 29, 2014 1:16 PM  
 To: Clarey-Sanford, Catherine  
 Subject: Re: Permission to use

Yes, you can use this information.

Dr. Leininger's works now are within the Creative Commons usage system. Additional information will be available on her website later next month.

You must site your source, as we always do in academia.

Thank you.  
 Dr. John Vanderlaan

From Leininger (2006b). Ethnonursing: A research method with enablers to study the theory of culture care. In M. M. Leininger and M. R. McFarland (Eds.), *Culture care diversity and universality: A worldwide nursing theory* (2nd ed., p. 51). Sudbury, MA: Jones and Bartlett. Reprinted with permission.

APPENDIX F  
OPEN INQUIRY GUIDE

Domain of Inquiry (DOI) for the cultural meanings, expressions, and patterns of care of the patient with a hospital-acquired pressure ulcer (HAPU) in the acute care medical-surgical unit.

Identifier: \_\_\_\_\_

Key or General Informant \_\_\_\_\_

Date of Interview: \_\_\_\_\_

Demographics:

1. Gender: Male or Female
2. Age: \_\_\_\_\_
3. Cultural/Ethnic Identify: \_\_\_\_\_
4. Job Title: \_\_\_\_\_
5. Highest Level of Education: \_\_\_\_\_
6. Number of years in present position: \_\_\_\_\_
7. Current employment status: Full time      Part time      Per Diem (PRN)

### Sample Questions

Questions are broad, open-ended and will follow the informant's lead. The semi-structured format includes questions to elicit data specific to the domain of inquiry for this study. Following are some sample question based on the Domain of Inquiry.

1. General Nursing/Health Care factors:
  - A. What is the meaning of 'care' to you?
  - B. What do you see as the link between good care and patient outcomes?
  - C. What do you see as the link between good care and pressure ulcer prevention?
  - D. What do you suspect is the cause of hospital-acquired pressure ulcers?
2. Ethno History
  - A. When and where did you first learn about pressure ulcer prevention interventions?
3. I would like to learn about your views, ideas, or experiences about caring for the patient with a hospital-acquired pressure ulcer.
  - A. How do you identify that a patient is at risk for a pressure ulcer?
  - B. What do you do when your patient is at risk?
  - C. How do you document your plan of care?
  - D. Do you suspect that care is being performed but not documented? If so, why?
4. Cultural Care Values, Beliefs and Practices
  - A. What does evidence-based practice mean to you?

- B. Could you share with me your values and beliefs regarding pressure ulcer prevention?
  - C. What nursing/health care practices do you believe have been the most helpful in addressing pressure ulcer prevention?
  - D. In what ways have your current hospital experiences helped or not helped?
5. Language and Communication
- A. How do you communicate pressure ulcer prevention interventions to your team?
  - B. In what ways would you like team members to communicate with you?
  - C. Have you experienced any miscommunications? If so, explain.
6. Technology
- A. In what ways do you think technology helped or hindered your care?
  - B. What, if any, technology was used to address the pressure ulcer risk?
  - C. Please share with me your views on the technology used to address the care provided to the patient with a HAPU.
7. Educational factors
- A. Has your educational background influenced your care?
  - B. Do you value education and health instructions?
  - C. What, if any, education or instruction did you provide to the patient with a HAPU? Documentation?
8. Kinship
- A. How have your peers influenced your care of the patient with a HAPU?
  - B. How have other disciplines influenced your care of the patient with a HAPU?
9. Religious/spiritual/philosophical factors
- A. How do you think your religious/spiritual/philosophical beliefs have influenced your care?
10. Economic factors
- A. How does the cost of health care influence your choice of specific pressure ulcer prevention interventions?
11. Political & Legal factors
- A. How has the introduction of what we know as “never events” such as a HAPU affected your care?

From Leininger (2006a). Culture care diversity and universality theory and evolution of the ethn nursing method. In M. M. Leininger & M. R. McFarland (Eds.) *Culture care diversity and universality: A worldwide nursing theory*, 2nd ed. p. 25. Sudbury, MA: Jones and Bartlett. Adapted with permission.



APPENDIX G  
LETTERS OF APPROVAL



LOYOLA UNIVERSITY CHICAGO  
 Health Sciences Division  
 Institutional Review Board for the Protection of Human Subjects  
 2160 South First Avenue  
 Maywood, IL 60153

06/02/2015

---

**NOTICE OF FULL APPROVAL OF A RESEARCH PROJECT**

---

Investigator **Schmidt, Lee**  
 LU Number **207621**  
 Title **Unavoidable Pressure Ulcers: An Ethnonursing Study**

Date of Initial Review **05/28/2015**  
 Type of Review **Expedited**  
 Action of Initial Review **Full Approval**

IRB Findings

1. The study is of minimal risk and qualifies for expedited review 45CFR46.110, b-1, HHS Secretary Category # 7.
2. The IRB waives the requirement to obtain written consent. The IRB finds the following (45 CFR 46.117c2)  
  
 The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.
3. Refer to conditions of approval.

Informed Consent Document required? **YES**

# of Participants **18**  
 Participants Compensated? **YES**  
  
 Amount (\$) **10**  
 Compensation Schedule **End of participation**

IRB Number  
 Date of Approval **05/28/2015**  
 Frequency of Review **Annual**  
 Date of First Review **05/28/2016**

Conditions of Approval **1. You must obtain verbal consent before conducting the interviews.**

ITEMS SUBMITTED FOR REVIEW

- 05/16/2015 Protocol
- 05/16/2015 Recruitment flyer
- 05/16/2015 Dissertation Proposal
- 05/16/2015 207621.050115

YOU HAVE FULL APPROVAL AND YOUR PROJECT MAY BEGIN.

**Lakeland Hospitals  
Niles and St. Joseph IRB #1**

To: Catherine Clarey-Sanford, RN  
Student in a PhD in Nursing Program  
Loyola University Chicago

Re: Understanding Unavoidable Pressure Ulcers

Date: June 3, 2015

This is to inform you Lakeland Hospitals Niles and St. Joseph, IRB# 1 has made the determination that Loyola University Chicago IRB can be the IRB of Record for the above research study.

The IRB operates in compliance with GCP and applicable laws and regulations to the best of its knowledge. In compliance with such procedures, laws and regulations, Investigators do not participate in the review and voting process for studies in which they participate. The IRB consists of members of the clinical and scientific communities, non-scientists, as well as members of the community as required by Federal regulations to assure a fair and thorough review process.

It is not the Institution's policy to submit individual lists of IRB members. I can assure you, however, that a quorum of the members were present at the meeting to authorize the chairperson to make decisions regarding a study's status.

Lakeland Hospitals Niles and St. Joseph, IRB# 1 is registered with the Office for Human Research Protections (OHRP). Please refer to OHRP's Web site for at <http://ohrp.osophs.dhhs.gov/irbasur.htm> for a list of registered IRBs.

Please call me if you have any questions about the terms of this approval.

  
\_\_\_\_\_  
Jann Totzke, IRB Chairperson  
Lakeland Hospitals Niles and St. Joseph, IRB# 1



LOYOLA UNIVERSITY CHICAGO  
 Health Sciences Division  
 Institutional Review Board for the Protection of Human Subjects  
 2160 South First Avenue  
 Maywood, IL 60153

06/26/2015

---

**PROJECT AMENDMENT: NOTICE OF FULL APPROVAL**

---

Investigator	Schmidt, Lee
LU Number	207621
Title	Unavoidable Pressure Ulcers: An Ethnonursing Study
IRB Number	
AMENDMENT #1 :	Documentation from the IRB of Lakeland Hospitals, Niles and St. Joseph's, approving the conduct of the study, based on the review by Loyola. St. Joseph's is the study site.
Type of Change	Administrative
Change in Patient Risk	No Change
Change to ICD?	NO
Inform Past or Current Patients?	NO
Review Date	06/26/2015
Review Type	Expedited
Action	Full Approval
Comments	The IRB reliance agreement is accepted.
DATE OF APPROVAL	06/26/2015

This Amendment Approval has been granted through an Expedited Review. The Full Board will review the Amendment and/or changes to the Informed Consent Document on 07/15/2015.

If the Board does not reaffirm this expedited decision, you will be notified by 07/22/2015.

  
 Elaine Fluder  
 Director  
 Human Research Protections Program  
 Loyola University Health Sciences Division

APPENDIX H

CONSENT TO PARTICIPATE IN RESEARCH

IRB NUMBER: 207621

LOYOLA UNIVERSITY CHICAGO  
HEALTH SCIENCES DIVISION  
MAYWOOD, ILLINOIS  
NIEHOFF SCHOOL OF NURSING

INFORMED CONSENT

Participant's Name: \_\_\_\_\_

Identification Number: \_\_\_\_\_

**PROJECT TITLE:** Unavoidable Pressure Ulcers: An Ethnonursing Study  
**THE APPROVAL FOR THIS PROJECT EXPIRES ON:** June 26, 2016

**Participant Information**

**PRINCIPLES CONCERNING RESEARCH:** You are being asked to take part in a research project. It is important that you read and understand the principles that apply to all individuals who agree to participate in the research project described below:

1. Taking part in the research is entirely voluntary
2. You will not benefit from taking part in the research but the knowledge obtained may help others.
3. You may withdraw from the study at any time without anyone objecting and without penalty or loss of any benefits to which you are otherwise entitled.

**PURPOSE OF RESEARCH:** You are being asked to participate in this study because you are:  
\_\_\_ An acute care registered nurse working on an adult medical-surgical unit and you provided care for a patient who developed a hospital-acquired pressure ulcer within the past 30 days.  
\_\_\_ A health care professional working on an adult medical-surgical unit where care was provided to a patient who developed a hospital-acquired pressure ulcer within the past 30 days.

The purpose of the research is to explore how your beliefs and values influenced the care that was provided to a patient who developed a hospital-acquired pressure ulcer. Approximately 18 health care professionals will participate in this research.

**DESCRIPTION AND EXPLANATION OF PROCEDURES:** If you agree to participate in this study, you will be asked to participate in an audiotaped in person or phone interview with Catherine Clarey-Sanford, doctoral candidate and one of the co-investigators for this study. You will be asked to share your beliefs, values, and practices regarding the care provided to a patient with a hospital-acquired pressure ulcer during an interview. The interview should last between 30 and 60 minutes and will be conducted at a place and time convenient for you and the interviewer.

The interview will be audio recorded. You may refuse to answer any question asked, ask to have the tape recorder shut off at any time, take a break during the interview, or end the interview at any time. After the interview is completed, the audiotape will be transcribed verbatim. This consent form will be transcribed verbatim by the transcriptionist if this is a verbal consent. Any names or identifying information disclosed during the interview will be deleted from the transcription and replaced with general information. Audiotapes will be destroyed upon completion of the study.

The information obtained during your interview will be combined with information obtained in the other interviews conducted in the course of the study.

**RISKS/DISCOMFORTS:** There are no foreseeable risks associated with participation in this study.

**BENEFITS:** You will not directly benefit from participating in this study. It is hoped that the information gained from this study will increase our understanding of unavoidable pressure ulcers. Some indirect benefits include a forum for you to express your ideas, and your contribution to the body of nursing knowledge.

**ALTERNATIVES:** You do not have to participate in this research project. Your decision about participation will not affect your employment status at Lakeland Health.

**FINANCIAL INFORMATION:** As a token of appreciation for participation in this study, you will receive a \$10 gift card at the conclusion of the study interview.

**CONFIDENTIALITY:** Any identifying information disclosed during the interview will be deleted from the transcribed record of the interview and replaced with generic terms to preserve confidentiality. The signed consent forms will be stored separately from the audiotapes and transcribed interviews. All consent forms, audiotapes, and transcribed interviews will be kept in locked file cabinets

Your records from this study will be considered confidential to the extent permitted by law. Authorized Loyola University Chicago employees, Institutional Review Board, the Department of Health and Human Services, or other agencies may review the research records from this study and must follow the same rules of confidentiality.

The results of this study will be submitted for publication and may be presented at professional conferences. Quotations from selected interviews may be used as examples in publications or presentations, but no identifying information will be presented with those quotations. If you have questions regarding your participation in this study at any time, you may contact Catherine Clarey-Sanford (cclareysanford@luc.edu or (269-369-8585) or Dr. Lee Schmidt (lschm3@luc.edu or (773-508-3466), co-investigators for the study.

If you ever feel that you have been injured by participating in this study or if you have any questions concerning your rights as a research participant, you may contact Dr. Kenneth Micetich, Chairman, Institutional Review Board for the Protection of Human Subjects-Medical Center (708-216-4608).

## CONSENT

You will receive a signed copy of this informed consent document.

You have been fully informed of the above described research program with its possible benefits and risks. Your signature below indicates that you are willing to participate in this research study and agree to the use and disclosure of information about you as described above. You do not give up any of your legal rights by signing this consent document.

\_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Signature: Participant

\_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Signature: Witness



APPENDIX I  
FLOOR PLAN OF MEDICAL-SURGICAL UNITS



Smile Faces = Nursing Stations  
 Stars = Clean Utility Rooms with Supplies

APPENDIX J

POLICY FOR SKIN/WOUND ASSESSMENTS

**DEPARTMENT: PATIENT SERVICES**

Policy - Procedure

**Subject: Skin / Wound Assessment (Pressure Ulcer Risk Assessment-  
Braden Scale)**

Policy/Code No.: 6000-038

Submitted by:

Date Effective: 08/1996

Date Last Review: 04/2014

Date Last Revision: 04/2014

---

**PURPOSE:** To identify and monitor patients at risk of skin breakdown throughout patient's hospitalization.

**POLICY:**

The Skin/Wound Assessment will be a part of the routine admission assessment.

- A. The Pressure Ulcer Risk Assessment/ Braden Scale, will be a part of a routine admission assessment including all admissions. Exempt are normal vaginal delivery, normal newborn nursery, and Pediatric patients under the age of 8 years.

**PROCEDURE:**

Skin / Wound Assessment and the Pressure Ulcer Risk Assessment/Braden Scale as described above will be initiated within 2 hours of the patients' arrival to the nursing unit and completed by the end of the shift. All dressings, including VAC dressings, bandages and compression wraps, need to be removed prior to skin assessment.

- A. Skin / Wound Assessment is to be repeated every shift. The Pressure Ulcer Risk Assessment/Braden Scale is to be repeated daily.
- B. Reassess both if patient's condition changes.
- C. Reassess both upon transfer/discharge.
- D. Assess bed surface based on the Recommended Prevention Measures.
- E. If applicable, identify the location of skin breakdown by anatomical site using term.
- F. If applicable, measure wound Length x Width x Depth at widest margins. Depth is deepest wound base to skin level. Length follows direction of head to toe (or 12:00 to 6:00). Width is perpendicular (or 3:00 to 9:00). Repeat measurements weekly.
- G. See the Skin Care Assessment Manual for definitions if needed to complete rest of wound assessment.
- H. Any skin breakdown identified after 24 hours of admission and not previously documented may be a hospital acquired condition. A Safety Call-out must be completed by the nurse in addition to the Skin/Wound Assessment documentation.
- I. Healed wounds and uncompromised surgical incisions do not need to be recorded in the Skin Assessment documentation.

Reviewed: 02/2012; 07/2013, 09/2013; 04/2014

APPENDIX K  
SCREEN SHOT FROM THE ELECTRONIC MEDICAL RECORD (EMR)  
OF THE PATIENT PHYSICAL ASSESSMENT

Screen Shot from the Electronic Medical Record (EMR) for Within Defined Limits (WDL)

The screenshot displays an EMR interface for a 'Respiratory' 'Devices Testing Template'. On the left, a sidebar lists various medical systems with checkboxes: Neurolog..., Cardiac, Respiratory, Gastrointe..., Genitourin..., Musculos..., Peripheral..., HEENT, Skin Color..., and Psychoso... All are checked. The main area shows a table with 'WDL' (Within Defined Limits) values for each system. A summary table at the top right shows 'ED to Hosp-Admiss...' data for dates 3/28/16 and 3/29/16, with values 0743 and 1400 respectively. The 'View All' button is active.

System	WDL
Neurological	WDL
Cardiac	X
Respiratory	X
Gastrointestinal	WDL
Genitourinary	WDL
Musculoskeletal	WDL
Peripheral Vascular	WDL
HEENT	WDL
Skin Color/Condition	WDL
Psychosocial	WDL

ED to Hosp-Admiss...		
Date	Value	Value
3/28/16	0743	1400
3/29/16		

Permission to use from Dr. Eileen Willits, PhD, RN  
 VP of Patient Care Services & Chief Nursing Executive  
 Lakeland HealthCare

APPENDIX L  
SCREEN SHOT FROM THE ELECTRONIC MEDICAL RECORD (EMR)  
OF THE BRADEN

Wound Assess/Care	Daily Cares/Safety	Intake/Output	Vital Signs	Triag
Mode: Accordion Expanded View All				
<b>Braden Scale</b> <input checked="" type="checkbox"/>			ED to H...	
Wound/Ostomy/Press... <input checked="" type="checkbox"/>			3/20/16	
Nutrition <input checked="" type="checkbox"/>			<b>1400</b>	
TPN <input type="checkbox"/>				
Positioning/Skin Care <input type="checkbox"/>				
Incontinence <input checked="" type="checkbox"/>				
Pressure Ulcer 03/20/16 <input checked="" type="checkbox"/>				
Incision 02/25/14 Abdo... <input checked="" type="checkbox"/>				
<b>Braden Scale</b>				
	Sensory Perceptions		2	
	Moisture		2	
	Activity		2	
	Mobility		2	
	Nutrition		2	
	Friction and Shear		1	
	Braden Scale Score		11	
<b>Wound/Ostomy/Pressure Ulcer/Incision (LDAs)</b>				
	Type of Wound (LDA)			
	Negative Pressure Therapy?			
<b>Nutrition</b>				
	Percent Meals Eaten (%)			
	Diet Supplements			
<b>Incontinence</b>				
	Bowel Incontinence			
	Urinary Incontinence			
<b>Pressure Ulcer 03/20/16</b>				
	Decubitus Ulcer Properties		Date First Asse	
	Wound bed			
	Peri-wound Assessment			
	Wound Length			
	Wound Width			
	Wound Depth			
	Tunneling			
	Undermining			
	Wound Staging			
	Drainage Amount			
	Drainage Color			
	Treatments			
	Dressing Type			
	Dressing Changed			
	Dressing Status			
	Wound Odor			
	Additional Wound Comments			

Permission to use from Dr. Eileen Willits, PhD, RN  
 VP of Patient Care Services & Chief Nursing Executive  
 Lakeland HealthCare



APPENDIX M

SCREEN SHOT FROM THE ELECTRONIC MEDICAL RECORD (EMR)

OF THE BRADEN-RELATED BEST PRACTICE ADVISORY

Screen Shot from the Electronic Medical Record (EMR) of the Best Practice Advisory (BPA) when Braden score is less than or equal to 18 (at risk for pressure ulcers)

Order Sets

Order Sets

▼ HIGH RISK BRADEN NURSING INTERVENTIONS- LRHS

▼ General

▼ Consults  
Please place CWOCN/ET eval and treat order for Braden score 12 and below

- CWOCN/ET nurse eval & treat
- Dietary Consult
- Prompt physician to place PT and OT consult orders

▼ High Risk Braden - Beds

- Versacare Bed  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Sign, Routine
- Total Care Sport Bed  
UNTIL DISCONTINUED, Call Hill-Rom to order rentals 800-638-2546, Routine
- Care Assist Bed (WV)  
UNTIL DISCONTINUED, Routine
- Total Care Bariatric Bed  
UNTIL DISCONTINUED, Call Hill-Rom to order rentals 800-638-2546, Routine

▼ High Risk Braden- nursing interventions

- High risk Braden  
Routine, CONTINUOUS starting Today at 1419 Until Specified
- Positioning instruction  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Sign, Routine
- Suspend/Dangle Heels  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Sign, Routine
- Use TEAL underpads  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Sign, Routine
- Start TAP system  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Sign, Routine
- Apply waffle cushion  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
when up in chair, Sign, Routine
- Apply Elbow/Heel Protector  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Sign, Routine
- Skin care precautions  
Routine, CONTINUOUS starting Today at 1419 Until Specified  
For incontinent patients.
- Pressure/shear relief  
UNTIL DISCONTINUED starting Today at 1419 Until Specified  
Avoid sliding/scotting, HOB less than 30 degrees unless contraindicated., Sign, Routine
- Turn patient  
EVERY 2 HOURS & PRN First occurrence Today at 1419 Until Specified  
Sign, Routine

Permission to use from Dr. Eileen Willits, PhD, RN  
VP of Patient Care Services & Chief Nursing Executive  
Lakeland HealthCare

APPENDIX N  
PERMISSION TO USE SCREEN SHOTS  
FROM THE ELECTRONIC MEDICAL RECORD (EMR)

Eileen Willits, PhD, RN  
VP of Patient Care Services & Chief Nursing Executive  
Lakeland HealthCare

On April 10, 2016, at 5:23 PM

Permission to use Screen Shots from EMR

Hi, should be fine as long as you give credit. Eileen

Sent from my iPad

On Apr 10, 2016, at 4:39 PM, Clarey-Sanford, Catherine  
[CCLAREYSANFORD@HospiceAtHomeCares.org](mailto:CCLAREYSANFORD@HospiceAtHomeCares.org)> wrote:

Dear Eileen,

I am in the process of writing Chapter 4 of my dissertation and when explaining specifics of our EMR charting, I would like to use screen shots in the appendices. I would not have any patient identification on any of the screen shots.

For example, the BPA order set related to a low Braden score looks like this (see attached).

I would like your permission to use screen shots in my dissertation.

If you have questions or concerns, please let me know.

Sincerely, Catherine

Catherine Clarey-Sanford, MSN, RN, CWOCN  
*Quality, Education and EMR Leader*  
Hospice at Home  
4025 Health Park Lane  
St. Joseph, MI 49085  
Office: (269) 429-7100  
Fax: (269) 429-1307

<BPA Screen Shot.docx>

APPENDIX O

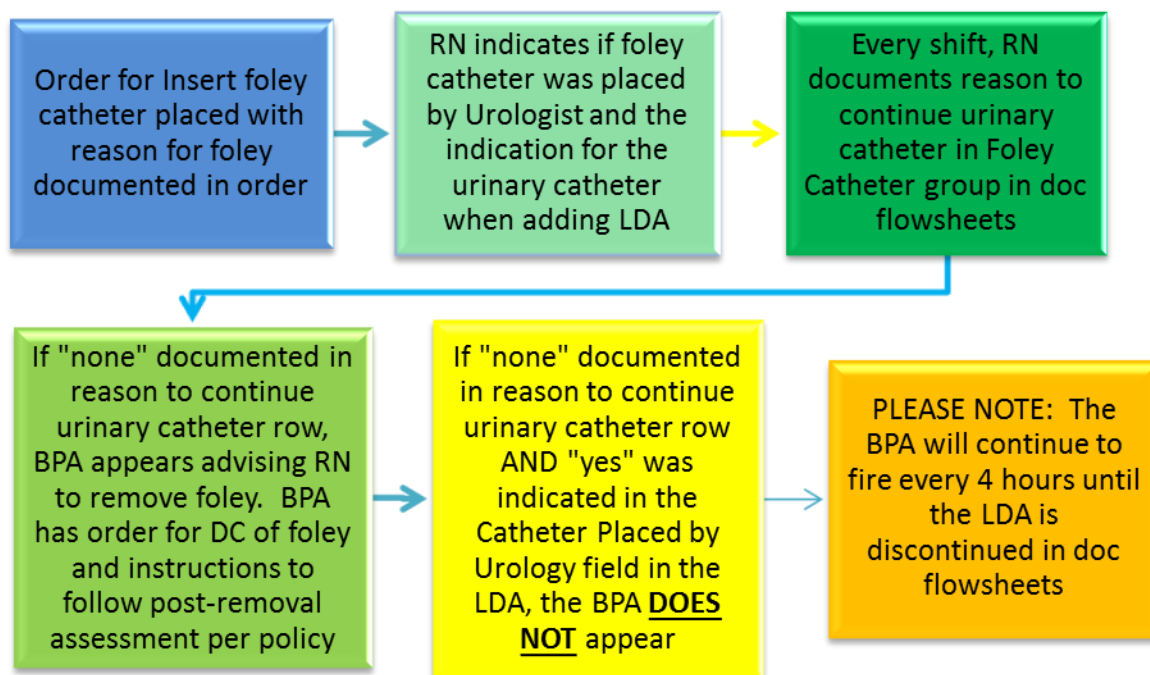
PROTOCOL FOR CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

**Effective Tuesday, November 3, 2015**

Please log into your myLearning account and complete the assigned eLearning entitled: Nurse-Driven Urinary Catheter Removal Protocol.

This eLearning will give you the pertinent information to enhance your practice in the early removal of indwelling urinary catheters to prevent CAUTIs (Catheter-Associated Urinary Tract Infections) as well as providing the appropriate care for after the catheter is removed.

This eLearning will give you the pertinent information to enhance your practice in the early removal of indwelling urinary catheters to prevent CAUTIs (Catheter-Associated Urinary Tract Infections) as well as providing the appropriate care for after the catheter is removed.



## REFERENCE LIST

- Agency for Healthcare Research and Quality (AHRQ, formerly the Agency for Health Care Policy and Research). (1992). *Pressure ulcer in adults: Prediction and prevention. Clinical Practice Guideline No. 3*. Rockville, MD: AHCPR Publication No. 92-0047.
- Agency for Healthcare Research and Quality. (2011). *Preventing pressure ulcers in hospitals: A toolkit for improving quality*. Retrieved from <http://tiny.cc/nzo2fy>
- Ahroni, J. H. (2014). Developing a wound and skin care program. *Journal of Wound, Ostomy, and Continence Nursing, 41*(16), 549-555. doi: 10.1097/WON.0000000000000085
- Aiken, L.H., Clarke, S.P., Sloane, D. M., Sochalski, J., & Silber, J.H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association, 288*(16), 1987-1993.
- Alvarez, O. M., Brindle, C. T., Langemo, D., Kennedy-Evans, K. L., Krasner, D. L., Brennan, M. R., & Levine, J. M. (2016). The VCU pressure ulcer summit: The search for a clearer understanding and more precise clinical definition of the unavoidable pressure injury. *Journal of Wound, Ostomy and Continence Nursing, 43*(5), 1-9. doi: 10.1097/WON.0000000000000255
- American Nurses Association. (1995). *Nursing care report card for acute care*. Washington, DC: ANA.
- American Nurses Association. (1996). *Nursing quality indicators: Definitions and implications*. Washington, DC: ANA.
- American Nurses Association. (1997). *Implementing nursing's report card: A study of RN staffing, length of stay and patient outcomes*. Washington, DC: ANA.
- American Nurses Association. (2015). *Code of ethics for nurses with interpretive statements*. Silver Spring, MD: Author.
- Amlung, S.R., Miller, W.L., & Bosley, L.M. (2001). The 1999 national pressure ulcer prevalence study: A benchmarking approach. *Advance Skin Wound Care, 14*(6), 297-3-1.
- Armour-Burton, T., Fields, W., Outlaw, L., & Deleon, E. (2013). The healthy skin project: Changing nursing practice to prevent and treat hospital-acquired pressure ulcers. *Critical Care Nurse, 33*(3), 32-39.

- Athlin, E., Idvall, E., Jernfält, M., & Johansson, I. (2009). Factors of importance to the development of pressure ulcers in the care trajectory: Perceptions of hospital and community care nurses. *Journal of Clinical Nursing, 19*(15-16), 2252-2258. doi: 10.1111/j.1365-2702.2009.02886.x
- Ayello, E.A., & Braden, B. (2002). How and why to do pressure ulcer risk assessment. *Advances in Skin and Wound Care, 15*(3), 125-132.
- Ayello, E.A., & Lyder, C.H. (2008). A new era of pressure ulcer accountability in acute care. *Advances in Skin & Wound Care, 23*(3), 134-140.
- Banning, M. (2008). A review of clinical decision making: Models and current research. *Journal of Clinical Nursing, 17*(2), 187-195.
- Bansal, C., Scott, R., Stewart, D., & Cockerell, C.J. (2005). Decubitus ulcers: A review of the literature. *International Journal of Dermatology, 44*, 805-810.
- Bates-Jensen, B.M., Cadogan, M., Osterweil, D., Levy-Storms, L., Jorge, J., Al-Samarrai, N., Grbic, V., & Schnelle, J.F. (2003). The Minimum Data Set pressure ulcer indicator: Does it reflect differences in care processes related to pressure ulcer prevention and treatment in nursing homes? *Pressure Ulcer Quality of Care, 31*(9), 1203-1212.
- Beeckman, D., Defloor, T., Demarré, L., Van Hecke, A., & Vanderwee, K. (2010). Pressure ulcers: Development and psychometric evaluation of the Attitude towards Pressure Ulcer Prevention instrument (APuP). *International Journal of Nursing Studies, 47*(11), 1432-1441.
- Beeckman, D., Defloor, T., Schoonhoven, L., & Vanderwee, K. (2011). Knowledge and attitudes of nurses on pressure ulcer prevention: A cross-sectional multicenter study in Belgian hospitals. *Worldviews on Evidence-Based Nursing, 8*(3), 166- 176. doi:10.1111/j.1741-6787.2011.00217.x
- Benbow, M. (2007). Back to basics—skin and wounds. *Journal of Community Nursing, 21*(5), 34-38.
- Benbow, M. (2009). Maintaining skin integrity and preventing pressure damage. *Nursing & Residential Care, 11*(9), 443-451.
- Berlowitz, D., Lukas, C.V., Parker, V., Niederhauser, A., Silver, J., Logan, C., Ayello, E., & Zulkowski, K. (2009). Preventing pressure ulcers in hospitals: A toolkit for improving quality of care. Retrieved from [goo.gl/jryWXe](http://goo.gl/jryWXe)
- Bickford, C. J. (2000). The computer-based patient record: A critical ethnography (Doctoral dissertation). Available from ProQuest database. (UMI No. 997991)



- Bjorvell, C., Wredling, R., & Thorell-Ekstrand, I. (2003). Improving documentation using a nursing model. *Journal of Advanced Nursing*, 43(4), 402–410.
- Black, J.M., Cuddigan, J.E., Walko, M.A., Didier, L.A., Lander, M.J., & Kelpel, M.R. (2010). Medical device related pressure ulcers in hospitalized patients. *International Wound Journal*, 7(5), 358-365. doi: 10.1111/j.1742-481X.2010.00699.x
- Black, J.M., Edsberg, L. E., Baharestani, M.M., Langemo, D., Goldberg, M., McNichol, L., Cuddigan, J., & the NPUAP. (2011). Pressure ulcers: Avoidable or unavoidable? Results of the National Pressure Ulcer Advisory Panel consensus conference. *Ostomy Wound Management*, 57(2), 24-37.
- Blair, W. & Smith, B. (2012). Nursing documentation: Frameworks and barriers. *Contemporary Nurse*, 41(2), 160–168. doi.org/10.5172/conu.2012.41.2.160
- Blegen, M.A., Goode, C.J., & Reed, L. (1998). Nurse staffing and patient outcomes. *Nursing Research*, 47(1), 43-50.
- Blegen, M.A., & Vaughn, T. (1998). A multisite study of nursing staffing and patient occurrences. *Nursing Economics*, 16(4), 196-203.
- Bly, D., Schallom, M., Sona, C., & Klinkenberg, D. (2016). A model of pressure, oxygenation, and perfusion risk factors for pressure ulcers in the intensive care unit. *American Journal of Critical Care*, 25(2), 156-164. doi: 10.4037/ajcc2016840
- Bostrum, J., & Kenneth, H. (1992). Staff nurse knowledge and perceptions about prevention of pressure sores. *Dermatology Nursing*, 4(5), 365-368.
- Braden, B., & Bergstrom, N. (1987). A conceptual schema for the study of the etiology of pressure sores. *Rehabilitation Nursing*, 12(1), 8-12.
- Brem, H., Maggi, J., Nierman, D., Rolnitzky, L., Bell, D., Rennert, M., ... Vladeck, B. (2010). High cost of stage IV pressure ulcers. *American Journal of Surgery*, 200(4), 473-477. doi: 10.1016/j.amjsurg.2009.12.021
- Brindle, C.T., Malhotra, R., O'Rourke, S., Currie, L., Chadwick, D., Falls, P., ... Creehan, S. (2013). Turning and repositioning the critically ill patient with hemodynamic instability: A literature review and consensus recommendations. *Journal of Wound, Ostomy and Continence Nursing*, 40(3), 254-267.
- Brooks, B., & Duncan, G.W. (1940). Effects of pressure on tissues. *Archives of Surgery*, 40, 696-709.

- Brooks, J. (1998). An analysis of nursing documentation as a reflection of actual nurse work. *MEDSURG Nursing*, 7(4), 189–198.
- Bryant, R.A., Shannon, M.L., Pieper, B., Braden, B.J., & Morris, D.J. (1992). Pressure ulcers. In R.A. Bryant, *Acute and chronic wounds: Nursing management* (pp. 105-163). St. Louis, MO: Mosby-Year Book.
- Burns, K. J. (2000). Power and effect size: Research considerations for the clinical nurse specialist. *Clinical Nurse Specialist*, 14(2), 61-65.
- Casterle, B., Goethals, S., & Gastmans, C. (2015). Contextual influences on nurses' decision-making in cases of physical restraint. *Nursing Ethics*, 22(6), 642-651.
- Center for Modeling Optimal Outcomes. (2009). *Silos: The "real" explanation*. Retrieved from [www.TheCenterNJ.com](http://www.TheCenterNJ.com)
- Centers for Medicare and Medicaid Services. (2007). *FY 2008 inpatient prospective payment system proposed rule improving the quality of hospital care*. Retrieved from [goo.gl/jryWXe](http://goo.gl/jryWXe)
- Centers for Medicare and Medicaid. (2008). *Eliminating serious, preventable, and costly medical errors-never events*. Retrieved from <http://www.cms.hhs.gov/apps/media/press/release.asp?counter=1863>
- Centers for Medicare and Medicaid. (2016). *Electronic health records (EHR) incentive programs*. Retrieved from <https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/>
- Cho, E., Chin, D.L., Kim, S., & Hong, O. (2016). The relationships of nurse staffing level and work environment with patient adverse events. *Journal of Nursing Scholarship*, 48(1), 74-82. doi: 10.1111/jnu.12183
- Committee on the Work Environment for Nurses and Patient Safety. (2004) *Keeping patients safe: Transforming the work environment for nurses*. National Academies Press, Washington DC. doi: 10.17226/10851
- Compton, F., Hoffman, F., Hortig, T., Straub, M., Frey, J., Zidek, W., & Schafer, J.H. (2008). Pressure ulcer predictors in ICU patients: Nursing skin assessment versus objective parameters. *Journal of Wound Care*, 17(10), 417-424.
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Cuddigan, J.G., Ayello, E.A., Sussman, C., & Baranoski, S. (2001). *Pressure ulcers in America: Prevalence, incidence, and implications for the future*. Reston, VA: NPUAP.

- Cutugno, C., Hozak, M. A., Fitzsimmons, D. L., & Ertogan, H. (2015). Documentation of preventative nursing measures in the elderly trauma patient: Potential financial impact and the health record. *Nursing Economics*, 33(4), 219-226.
- Dealey, C., Chamber, T., Beldon, P., Benbow, M., Fletcher, J., Fumarola, S., ... Members of the Tissue Viability Society. (2012). Achieving consensus in pressure ulcer reporting. *Journal of Tissue Viability*, 21, 72-83. doi: 10.1016/j.jtv.2012.05.001
- Dealey, C., Posnett, J., & Walker, A. (2012). The cost of pressure ulcers in the United Kingdom. *Journal of Wound Care*, 21(6), 261-261, 264, 266.
- Donabedian, A. (1986). Criteria and standards for quality assessment and monitoring. *Quality Review Bulletin*, 14(3), 99-108.
- Donabedian, A. (2003). Selecting approaches to assessing performance. In R. Bashshur (Ed.), *An introduction to quality assurance in healthcare*. New York, NY: Oxford University.
- Dunton, N., Gajewski, B., Klaus, S., & Pierson, B. (2008). The relationship of nursing workforce characteristics to patient outcomes. *The Online Journal of Issues in Nursing*, 12 (3), Manuscript 3. doi: 10.3912/OJIN.Vol12No03Man03
- Edsberg, L. E., Langemo, D., Beharestani, M. M., Posthauer, M. E., & Goldberg, M. (2014). Unavoidable pressure injury: State of the science and consensus outcomes. *Journal of Wound, Ostomy and Continence Nursing*, 41(4), 313-334. doi: 10.1097/WON.0000000000000050
- Eisenberger, A., & Zeleznik, J. (2003). Pressure ulcer preventions and treatment in hospices: A qualitative analysis. *Journal of Palliative Care*, 19(1), 9-14.
- European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel. (2009). *Prevention and treatment of pressure ulcers: Quick reference guide*. Washington, DC: NPUAP. Retrieved from [http://www.epuap.org/guidelines/Final\\_Quick\\_Prevention.pdf](http://www.epuap.org/guidelines/Final_Quick_Prevention.pdf)
- Fawcett, J., & Garity, J. (2009). Evaluation of research designs for theory-generating and theory-testing research. In J. Fawcett and J. Garity, *Evaluating research for evidence-based nursing practice*, (pp. 91-131). Philadelphia: F. A. Davis Company.
- Fishbein, M., Ajzen, I. The influence of attitudes on behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-222). New York, NY: Psychology Press.
- Frank-Stromborg, M., Christensen, A, & Elmhurst, D. (2001). Nurse documentation: Not done or worse, done the wrong way – part I. *Oncology Nursing Forum*, 28(4), 697-702.

- Galant, C., Morin, D., St. Germain, D., & Dallaire, D. (2010). Prevention and treatment of pressure ulcers in a university hospital centre: A correlational study examining nurses' knowledge and best practice. *International Journal of Nursing Practice*, 16, 183-187.
- Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2011). *Getting out of the data: Grounded theory conceptualization*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Company.
- Gottlober, P. (2001). Medicare hospital prospective payment system: How DRG rates are calculated and updated. Retrieved from <http://oig.hhs.gov/oei/reports/oei-09-00-00200.pdf>.
- Gray, S., & Hampton, S. (2015). A united approach to the prevention of pressure ulcers. *Nursing & Residential Care*, 17(3), 137 – 142.
- Gunningberg, L., Fogel-Dahm, M. & Egrenberg, A. (2009). Improved quality and comprehensiveness in nursing documentation of pressure ulcer after implementing an electronic record in hospital care. *Journal of Clinical Nursing*, 18, 1557-1564. doi: 10.1111/j.1365-2702.2008.02647.x
- Gunningberg, L., Lindholm, C., Carlsson, M., and Sjoden, P. (2001). Risk, prevention and treatment of pressure ulcers – nursing staff knowledge and documentation. *Scandinavian Journal of Caring Sciences*, 15, 257-263.
- Hajek, A. M. (2013). Breaking down clinical silos in healthcare. *Frontiers of Health Service Management*, 29(4), 45-50.
- Herlihy, B., & Maebius, N. (2000). *The human body in health and illness*. London: W.B. Saunders.
- Hill-Rom. (2016). *International pressure ulcer prevalence survey*. Retrieved from <http://www.hill-rom.com/usa/Clinical-Resources/Clinical-Focus-Areas/Pressure-Ulcer-Management-/Quality-Measures/International-Pressure-Ulcer-Prevalence-IPUP-Survey/>
- Horsburgh, M., Merry, A.F., & Seddon, M. (2005). Patient safety in an interprofessional learning environment. *Medical Education*, 39(5), 512-513. doi: 10.1111/j.1365-2929.2005.02136.x

- Houser, J. (2003). A model for evaluating the context of nursing care delivery. *Journal of Nursing Administration*, 33(1), 39-47.
- Hubbert, A. O. (2006). Application of Culture Care Theory for clinical nurse administrators and managers. In M. M. Leininger & M. R. McFarland (Eds.) *Culture care diversity and universality: A worldwide nursing theory*, 2nd ed. pp. 1-41. Sudbury, MA: Jones and Bartlett.
- Institute for Healthcare Improvement. (2006). Protecting 5 million lives from harm. Getting started kit: Preventing pressure ulcers. Retrieved from: <http://www.ihi.org>
- Institute of Medicine. (1999). *To err is human: Building a safer health system*. Washington, DC: National Academy Press.
- Jankowski, I. M., & Nadzam, D. M. (2011). Identifying gaps, barriers, and solutions in implementing pressure ulcer prevention programs. *The Joint Commission Journal on Quality and Patient Safety*, 37(6), 253-264.
- Jones, T. L. (2015). A descriptive analysis of implicit rationing of nursing care: Frequency and patterns in Texas. *Nursing Economics*, 33(3), 144-154.
- Kalisch, B. J., Landstrom, G. L., & Hinshaw, A. S. (2009). Missed nursing care: A concept analysis. *Journal of Advanced Nursing*, 65, 1509-1517.
- Kane, R. L., Shamliyan, T.A., Mueller, C., Duvall, S., & Wilt, T. J. (2007). The association of registered nurses staffing levels and patient outcomes: Systematic review and meta-analysis. *Medical Care*, 45(12), 1195-1204.
- Kelley, T. F., Brandon, D. H., & Docherty, S. L. (2011). Electronic nursing documentation as a strategy to improve quality of care. *Journal of Nursing Scholarship*, 43(2), 154-162. doi: 10.1111/j.1547-5069.2011.01397.x
- Kiely, C. (2012). Cultural transformation in pressure ulcer prevention and care. *Journal of Wound, Ostomy and continence Nursing*, 39(4), 443-446. doi: 10.1097/WON.0b013e31825d23ae
- Kollemorten, I., Strandberg, C., Thomsen, B. M., Wiberg, O., Windfeld-Schmidt, T., Binder, V., ... Riis, P. (1981). Ethical aspects of clinical decision-making. *Journal of Medical Ethics*, 7(2): 67-69. doi: 10.1136/jme.7.2.67
- Kosiak, M. (1961). Etiology of decubitus ulcers. *Archives of Physical Medicine and Rehabilitation*, 42, 19-29.

- Kossman, S. P., & Scheidenhelm, S. L. (2008). Nurses' perceptions of the impact of electronic health records on work and patient outcomes. *Computers, Informatics, Nursing*, 26(2), 69-77.
- Krapfl, L.A., & Mackey, D. (2008). Medicare changes to the hospital inpatient prospective payment systems. *Journal of Wound, Ostomy, Continence Nursing*, 35(1), 61-62.
- Lang, N. M. (2008). The promise of simultaneous transformation of practice and research with the use of clinical information systems. *Nursing Outlook*, 56(5), 232-236. doi: 10.1016/j.outlook.2008.06.011
- Langemo, D.K., Black, J., & the National Pressure Ulcer Advisory Panel. (2010). Pressure ulcers in individuals receiving palliative care: A national pressure ulcer advisory white paper. *Advances in Skin & Wound Care*, 23(2), 59-72.
- Langemo, D.K., & Brown, G. (2006). Skin fails too: Acute, chronic, and end-stage skin failure. *Advances in Skin & Wound Care*, 19(4), 206-211.
- Lavin, M. S., Harper, E., & Barr, N. (2015). Health information technology, patient safety, and professional nursing care documentation in acute care settings. *The Online Journal of Issues in Nursing*, 20(2). doi: 10.3912/OJIN.Vol20No02PPT04
- Leininger, M. M. (2001). *Culture care diversity and universality: A theory for nursing*. New York: National League for Nursing Press.
- Leininger, M. M. (2006a). Culture care diversity and universality theory and evolution of the ethnonursing method. In M. M. Leininger & M. R. McFarland (Eds.) *Culture care diversity and universality: A worldwide nursing theory*, 2nd ed. pp. 1-41. Sudbury, MA: Jones and Bartlett.
- Leininger, M. M. (2006b). Ethnonursing: A research method with enablers to study the theory of culture care. In *Culture Care Diversity and Universality: A Worldwide Nursing Theory* (2 ed., pp. 43-81). Sudbury, MA: Jones and Bartlett.
- Leininger, M., & McFarland, M. (2002). *Transcultural Nursing: Concepts, Theories, Research and Practice* (3rd Ed.). New York, NY: McGraw-Hill Medical.
- Leininger, M., & McFarland, M. (2006). *Culture care diversity and universality: A worldwide nursing theory* (2nd Ed.). Sudbury, MA: Jones and Bartlett.
- Levine, J.M., Humphrey, S., Lebovits, S., & Fogel, J. (2009). The unavoidable pressure ulcer: A retrospective case series. *Journal of Clinical Outcomes Management*, 16(8), 359-363.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage

- Loan, L. A., Jennings, B. M., Brosch, L. R., DePaul, D., & Hildreth, P. (2003). Indicators of nursing care quality: Findings from a pilot study. *Outcomes Management, 7*(2), 51-60.
- Lyder, C.H. (2003). Pressure ulcer prevention and management. *The Journal of the American Medical Association, 289*(2), 223-226. doi:10.1001/jama.289.2.223
- Lyder, C. H., Wang, Y., Metersky M, Curry, M., Kilman, R., Verzier, N. R., & Hunt, D. (2012). Hospital-acquired pressure ulcers: Results from the national Medicare patient safety monitoring system study. *Journal of American Geriatrics Society, 60*(9), 1603-1608. doi: 10.1111/j.1532-5415.2012.04106.x
- Maklebust, J., & Sieggreen, M. (2000). *Pressure ulcers: Guidelines for prevention and nursing management*. Springhouse, PA: Springhouse.
- Mattie, A.S., & Webster, B.L. (2008). Centers for Medicare and Medicaid Services' "never event": An analysis and recommendations to hospitals. *Health Care Manager, 27*(4), 338-249.
- Maylor, M. (2001). Senior nurses' control expectations and the development of pressure ulcers. *Nursing Standard, 15*(45), 33-37.
- Maylor, M., & Torrance, C. (1999). Pressure sore survey part 2: Nurses' knowledge. *Journal of Wound Care, 8*(2), 49-52.
- McFarland, M., & Zehnder, N. (2006). Culture care of German American elders in a nursing home context. In M. M. Leininger & M. R. McFarland (Eds.), *Culture care diversity and universality: A worldwide nursing theory* (pp. 181-206). Sudbury, MA: Jones and Bartlett.
- McGeehan, R. (2007) Best practice in record-keeping. *Nursing Standard, 21*(17): 51–55.
- Meesterberends, E. (2013). *Pressure ulcer care in the Netherlands versus Germany: What makes the difference?* (Doctoral thesis). Retrieved from <http://tiny.cc/xpp2fy>
- Merriam-Webster's. (n.d.). Unavoidable. In *Merriam-Webster's online dictionary*. Retrieved from <http://www.merriam-webster.com/dictionary/unavoidable>
- Mitchell, R., Boyle, B., Parker, V., Giles, M., Chiang, V., & Joyce, P. (2015). Managing inclusiveness and diversity in teams: How leader inclusiveness affects performance through status and team identify. *Human Resource Management, 54*(2), 217-239.
- Moore, Z., & Price, P. (2004). Nurses' attitudes, behaviours, and perceived barriers towards pressure ulcer prevention. *Journal of Clinical Nursing, 13*, 942-951.

- National Database of Nursing Quality Indicators. (2015). Lakeland HealthCare by Department for Group 1. Retrieved December 10, 2015 from [www.nursingquality.org](http://www.nursingquality.org).
- National Pressure Ulcer Advisory Panel. (2007). *Updated staging system*. Retrieved from <http://www.npuap.org/pr2.htm>
- National Pressure Ulcer Advisory Panel. (2010). *Not all pressure ulcers are avoidable: Press Release*. Retrieved from [http://www.npuap.org/A\\_UA%20Press%20Release.pdf](http://www.npuap.org/A_UA%20Press%20Release.pdf)
- National Pressure Ulcer Advisory Panel. (2016). *NPUP pressure injury stages*. Retrieved from <https://www.npuap.org/resources/educational-and-clinical-resources/npuap-pressure-injury-stages/>
- National Quality Forum. (2002). *Serious reportable events in healthcare: A consensus report*. Washington, DC: NQF.
- Nix, D. (2011). Under the radar: Pressure, friction, and shear from medical devices. 3M-Sponsored in Booth Educational Programs at the 2011 WOCN 43<sup>rd</sup> Annual Conference, June 5, New Orleans, LA. Peerless, J.R., Davies, A., Klein, D., & Yu, D. (1999). Skin complications in the intensive care unit. *Clinical Chest Medicine*, 20(2), 453-456.
- Owen, K. (2005). Documentation in nursing practice. *Nursing Standard*, 19(32), 48-49.
- Page, A. (2004). *Keeping patients safe: Transforming the work environment of nurses*. Washington, D.C.: The National Academies Press.
- Papastavrou, E., Andreou, P., & Vryonides, S. (2014). The hidden ethical element of nursing care rationing. *Nursing Ethics*, 21(5), 583-593. doi: 10.1177/0969733013513210
- Pappas, S., Davidson, N., Woodard, J., Davis, J., & Welton, J.M. (2015). Risk-adjusted staffing to improve patient value. *Nursing Economics*, 33(2), 73-79.
- Peerless, J.R., Davies, A., Klein, D., & Yu, D. (1999). Skin complications in the intensive care unit. *Clinical Chest Medicine*, 20(2), 453-456.
- Pepler, C.J., Edgar, L., Frisch, S., Rennick, J., Swidzinski, M., White, C., Brown, T.G., & Gross, J. (2005). Unit culture and research-based nursing practice in acute care. *Canadian Journal of Nursing Research*, 37(3), 66-85.
- Petty, R.E., & Cacioppo, J.T. (1996). *Attitudes and persuasion: Classic and contemporary approaches*. Boulder, CO: Westview Press.



- Pieper, B. (2000). Mechanical forces: Pressure, shear, and friction. In R.A. Bryant (Ed.), *Acute & chronic wounds: Nursing management* (2<sup>nd</sup> ed., pp. 221-264). St. Louis, MO: Mosby.
- Pittman, J., Beeson, T., Colin, T., Dillon, J., Hampton, C., Kerley, D., ... Tucker, J. (2016). Unavoidable pressure ulcers: Development and testing of the Indianan University Health Pressure Ulcer Prevention Inventory. *Journal of Wound, Ostomy and Continence Nursing*, 43(1), 32-38. doi: 10.1097/WON.0000000000000191
- Polit, D. F., & Beck, C. T. (2010). *Essentials of nursing research: Appraising evidence for nursing practice* (7th ed.). Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Posthauer, M.E. (2006). Documentation: A vital link to nutritional care. *Advances in Skin & Wound Care*, 19 (3), 134-136.
- Reed, L., Blegen, M.A., & Goode, C.S. (1998). Adverse patient occurrences as a measure of nursing quality. *The Journal of Nursing Administrations*, 28(5), 62-69.
- Remington, L. (2011). Never events: Implications expand across all care settings. *The Remington Report*, May/June, 4-6.
- Revello, K., & Fields, W. (2012). A performance improvement project to increase nursing compliance with skin assessments in a rehabilitation unit. *Rehabilitation Nursing*, 37(1), 37-41.
- Richards, L., & Morse, J. M. (2007). *Readme first for a user's guide to qualitative methods* (2nd ed.). Thousand Oaks, CA: Sage publications.
- Robles, J. (2009). The effect of the electronic medical record on nurses' work. *Creative Nurse*, 15(1), 31-35.
- Rogers, L. M. (2013). Opening the black box: Understanding adult inpatient falls. (Doctoral dissertation). Available from ProQuest database. (UMI No. 3597054).
- Roper, J.M., & Shapira, J. (2000). *Ethnography in nursing research*. Thousand Oaks, CA: Sage Publications.
- Samuriwo, R. (2012). Pressure ulcer prevention: The role of the multidisciplinary team. *British Journal of Nursing*, 21(5), S4-S13.
- Samuriwo, R. (2010). The impact of nurses' values on the prevention of pressure ulcers. *British Journal of Nursing*, 19(15), S4-S8. doi:10.1111/j.1440-172X.2010.01828.x

- Schubert, M., Glass, T. R., Clarke, S. P., Aiken, L. H., Schaffert-Witvliet, B., Sloane, D. M., & De Geest, S. (2008). Rationing of nursing care and its relationship to patient outcomes: The Swiss extension of the international hospital outcomes study. *International Journal for Quality in Health Care*, 20, 227-237. doi:10.1093/intqhc/mzn017
- Searle, C., & McInerney, F. (2008). Nurses' decision-making in pressure area management in the last 48 hours of life. *International Journal of Palliative Nursing*, 14(9), 432-438.
- Shanks, J.T., Kleinhelter, P., & Baker, J. (2009). Skin failure: A retrospective review of patients with hospital-acquired pressure ulcers. *World Council of Enterostomal Therapists Journal*, 29(1), 6-10.
- Sibbald, R.G., Krasner, D.L., & Lutz, J. (2010). SCALE: Skin changes at life's end: Final consensus statement. *Advances in Skin and Wound Care*, 23(5), 225-236.
- Sibbald, R. G., Krasner, D.L., Lutz, J.B., Alvarez, Sylvia, C., O., Ayello, E.A., ... Weir, D. (2008). *Skin Changes At Life's End (SCALE): Final Consensus Document*. Retrieved from <http://tinyurl.com/o2ebztk>
- Soban, L.M., Finley, E.P., & Miltner, R.S. (2016). Identifying patterns in implementation of hospital pressure ulcer prevention programs. *Journal of Wound, Ostomy and Continence Nursing*, 43(3), 248-253. doi: 10.1097/WON.0000000000000228
- Spoerner, D. (2009). Check boxes are no substitute for narrative documentation. *American Journal of Critical Care*, 18(3), 192. doi: 10.4037/ajcc2009420
- Stokowski, L.A. (2010). In this corner: The unavoidable pressure ulcer. *Medscape Nurses*. Retrieved from <http://www.medscape.com/viewarticle/715969>
- Strayer, L. S., & Martucci, N. M. (1997). Promoting skin integrity: An interdisciplinary challenge. *Rehabilitation Nursing*, 22(5), 259-262. doi: 10.1002/j.2048-7940.1997.tb02113.x
- Thomas, D.R. (2001). Prevention and treatment of pressure ulcers: What works? What doesn't? *Cleveland Clinic Journal of Medicine*, 68(8), 704-722.
- Thomas, D.R. (2003). Are all pressure ulcers avoidable? *Journal of American Medicaid Directors Association*, 4, 544-548.
- Titler, M. G., & Everett, L. Q. (2001). Translating research into practice: Considerations for critical care investigators. *Critical Care Nursing Clinics of North America*, 13(4), 587-604.

- Trumble, J.C. (1930). The skin tolerance for pressure and pressure sores. *Medical Journal of Australia*, 2, 724-726.
- Vaismoradi, M., Bondas, T., Salsali, M., Jasper, M., & Turunen, H. (2014). Facilitating safe care: A qualitative study. *Journal of Nursing Management*, 22, 106-116.
- Wakefield, A., Carlisle, C., Hall, A., & Attree, M. (2008). Patient safety investigations: The need for interprofessional learning. *Learning in Health and Social Safety Care*, 8(1), 22-32. doi: 10.1111/j.1473-6861.2008
- Wehbe-Alamah, H. (2006). Generic care of Lebanese Muslim women in the Midwestern USA. In M.M. Leininger & R.R. McFarland (Eds.), *Culture care diversity and universality: A worldwide nursing theory* (pp. 307-348). Sudbury, MA: Jones and Bartlett.
- White, M., & Fletcher, J. (1991). The Patient Self Determination Act. On balance, more help than hindrance. *The Journal of the American Medical Association*, 266(3), 410-412.
- Worley, C. (2007). Skin failure: The permissible pressure ulcer. *Dermatology Nursing*, 19(4), 384-385.
- Wound, Ostomy, and Continence Nursing Society. (2016). *The History of the WOCN Society*. Retrieved from [http://www.wocn.org/?page=about\\_us](http://www.wocn.org/?page=about_us)
- Wound, Ostomy, and Continence Nursing Society Board of Directors. (2009). Position paper: *Avoidable versus unavoidable pressure ulcers*. Retrieved from: <http://tinyurl.com/jrrd8r2>
- Wysocki, A. B. (2000). Anatomy and physiology of skin and soft tissue. In R. A. Bryant (Ed.), *Acute and chronic wounds: Nursing management* (2<sup>nd</sup> ed., pp 1-16). St. Louis, MO: Mosby.
- Yang, P., Hung, C., Chen, Y., Hu, C., & Shieh, S. (2012). The impact of different nursing skill mix models on patient outcomes in a respiratory care center. *Worldviews on Evidence-Based Nursing*, 9(4), 227-233. doi: 10.1111/j.1741-6787
- Yastrub, D. J. (2010). Pressure or pathology: Distinguishing pressure ulcers from the Kennedy terminal ulcer. *Journal of Wound, Ostomy, and Continence Nursing*, 37(3), 249-250.

## VITA

Catherine M. Clarey-Sanford received her diploma degree in nursing from the Henry Ford Hospital School of Nursing in Detroit, Michigan in 1977. After years of acute care experience, she obtained her Bachelor of Science in Nursing degree in 1988 from the University of Michigan in Flint, Michigan. This degree gave her the opportunity to teach nursing students in the clinical setting and a desire to pursue graduate level education. In 2000, she received her Master of Science in Nursing degree with a focus on nursing education from Grand Valley State University in Allendale, Michigan. During her master's studies, she also obtained a certification in wound, ostomy, and continence nursing from the R. B. Turnbull, Jr. MD, WOCN Education Program, Cleveland Clinic, Ohio. Ms. Clarey-Sanford is a member of the profession's Honor Society of Nursing, Sigma Theta Tau International, as well as the Wound, Ostomy and Continence Nurses Society and the Society of Urologic Nurses and Associates. Currently, she is the Quality, Education, and Electronic Medical Record Clinical Leader for Caring Circle, an agency able to provide home care, palliative care, and hospice services in St. Joseph, Michigan.

