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The Magnet Journey: Understanding the Role of the Unit Culture in
Evidence-Based Practice Adoption

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Abstract

The Magnet Journey: Understanding the Role of Unit Culture in Evidence-Based Practice Adoption

By Kim Schippits

Purpose: The purpose of this exploratory study was to identify salient cognitive beliefs and cultural assumptions that affect the emergence and maintenance of evidence-based practice (EBP) in the hospital setting.

Scope: The use of EBP does not consistently occur in the nation's hospitals and this leads to substandard patient/family outcomes. EBP is a decision-making process that integrates the use of best evidence or research, patient/family preferences, and clinical expertise. This definition parallels the IOM's calls for transformation of the healthcare system to one that is evidence-based and patient/family centered. Understanding individual and cultural attributes that influence nurses' behavior is vital to achieving this goal.

Methods: This exploratory study utilized a qualitative approach, consisting of in-depth interviews of 35 Registered Nurses on adult medical-surgical or critical care units in a Magnet journey or Magnet designated hospital in a large metropolitan area in the Southeastern US. Data were analyzed using the principles of analytic ethnography.

Results: The multilevel theoretical model framing this study was extended and refined based on the data resulting in the creation of a new multilevel model. Extensions to the model included the identification of two antecedent variables: hospital-level basic assumptions and unit leader characteristics. Refinements to the model included specification of the unit-level culture and individual cognitive beliefs. New relationships among all variables were identified.

Significance: The new EBP implementation and sustainability model provides a more complete description of how nurses implement and maintain EBP in the acute care setting. Further study of the hospital-level culture and unit-level nurse leader characteristics is needed to develop effective interventions to accelerate the use of EBP in the hospital staff nurses.

Key Words: EBP model, research utilization, culture, magnet, qualitative, leadership, empowerment

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Chapter One

Statement of the Problem, Specific Aims, and Theoretical Framework

Evidence-based practice (EBP) has been identified as the cornerstone of safe and effective healthcare and has been related to recent improvements in several critical outcomes, including ventilator-associated pneumonia (Burns et al., 2003; Resar et al., 2005), central-line associated infections (Berenholtz et al., 2004), and surgical site infections (Bratzler et al., 2005). Yet, the majority of nurses and physicians do not practice within an evidence-based framework (Grol & Grimshaw, 2003; Melnyk & Fineout-Overholt, 2005ab; Melnyk, Fineout-Overholt, Stone, & Ackerman, 2000; Schuster, McGlynn, & Brook, 1998). Extensive study has focused on the gap between knowledge and practice for the past thirty years. While there is greater understanding of factors that influence individual adoption of EBP and use of research in practice, there has been little overall change in daily practice. The goal of this research is to contribute new knowledge that may drive new interventions to increase EBP and associated patient outcomes.

To date, explanatory frameworks for the adoption of EBP and research utilization have focused on these phenomena from the perspective of the individual. They have looked primarily at individual characteristics associated with EBP and research utilization as well as the perceived barriers and facilitators. While this research has led to the identification of consistent intra-personal and contextual factors related to EBP and research utilization, the vast majority of studies have lacked theoretical frameworks. Inconsistent conceptualization and measurement of key factors have provided few insights into meaningful interventions to increase EBP and research utilization (Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003a). Focus on individual attitudes and constraints have not markedly increased the rate of adoption of EBP or research utilization.

Most registered nurses work in acute care settings within complex healthcare organizations. Complex healthcare organizations are recognized as having an organizational context, which is defined as the environment where people receive healthcare (McCormack et al., 2002). Organizational context is a multifaceted construct, which is comprised of several concepts, such as the physical environment, infrastructure (systems and processes that direct and manage work), staff and supply resources, leadership, autonomy over decision-making, and culture. It has been discovered that the organizational context, in both magnet and nonmagnet hospitals, influences what happens at the unit level, which, in turn, affects individual nurse behavior and is found to be a significant predictor of important outcomes, including nurse satisfaction, empowerment, and numerous patient quality outcomes (Aiken, 2001; Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Aiken, Smith, & Lake, 1994; Aiken, Sochalski, & Lake, 1997). The connection between organizational context and outcomes demonstrates the importance of the context in improving healthcare outcomes. To this point, there is a lack of understanding regarding the linkages between the attributes of the organizational context and how they influence nurses' behavior, and thereby, healthcare outcomes with organizational culture being the least studied factor (Needleman, Kurtzman, & Kizer, 2007).

The unit culture is recognized as a salient feature of the context for nursing practice on hospital units and as an important component of the nurse work environment. In light of the link between the organization and unit level in hospitals, the importance of the unit culture in nurses' adoption of EBP cannot be overlooked. In fact, over the last decade, several scientists have suggested expanding the scope of EBP research to include the role that culture, at the organizational and unit level, has on the adoption of EBP (Estabrooks, 1999, 2003; Estabrooks et al., 2003a; Kitson, 1999; McCormack et al., 2002; Meijers et al., 2006; Scott, S. & Pollock, 2008). However, there

has been minimal systematic study of the influence of the organizational and unit culture on EBP adoption as well as the interplay between the unit culture and individual behavior as it relates to EBP adoption (Foxcroft & Cole, 2009).

The goal of this study is to expand understanding of the role that unit culture in the hospital setting has on nurses' adoption of EBP. This research builds on previous research by incorporating individual factors into a multilevel model that posits a potential interaction with unit-level culture characteristics. Ultimately, the aim of this research is to expand the scope of interventions that optimize EBP in the acute setting.

Statement of the Problem

In 2001, as a part of the blueprint for a new health care system, the Institute of Medicine (IOM) emphasized the importance of a patient-centered and evidence-based model of care (Institute of Medicine, 2001). Using the best knowledge available continues to be accepted as integral to reducing preventable errors and improving the safety and quality of care. Interventions aimed at the use of opinion leaders, audit and feedback, and reminder systems to improve EBP implementation have yielded equivocal results and ineffectively change clinical practice in a timely manner (Davis & Taylor-Vaisey, 1997; Grol & Grimshaw, 1999, 2003; Oxman, Thomson, Davis, & Haynes, 1995). For the past thirty years, nursing scholars have studied nurse-perceived facilitators and barriers to achieving research utilization and EBP. In spite of this rich research history, the process by which nurses engage in EBP remains poorly understood and under theorized.

Culture has been identified as a characteristic of the organizational context that may have an important influence in nurses' performance. Culture is a complex concept that represents basic assumptions, shared meanings, values, beliefs, and norms that are collectively developed and shared by a group of people. The basic assumptions, values, beliefs, and norms, in turn, exert a powerful influence on the beliefs and behavior of

group members. Culture is developed through an on-going group learning process as the group solves its problems of external adaptation and internal integration and is defined, created, and transmitted through small group interaction (Fine, 1979, 2006; Harrington & Fine, 2000; Schein, 2004). Organizations, such as a hospital, develop a culture at the organizational level in addition to a multiplicity of subcultures at the workgroup or unit level. The culture that develops at the subgroup or unit level reflects the larger organizational culture, but it can also differ from the organizational culture and other subcultures in important ways (Griswold, 2008; Schein, 2004). This study is interested in the unit culture that develops as hospitals undertake the Magnet designation process and how it influences nurses' adoption of EBP.

The influence that culture exerts on individual behavior is recognized as important; however, it is unknown how the unit culture constrains or facilitates a nurse's ability to implement EBP or their perception of EBP. The growing body of research on Magnet hospitals has demonstrated that what happens at the unit level in a hospital exerts a powerful influence upon nursing practice and, consequently, leads to improvement of patient and nurse outcomes. Achieving and maintaining Magnet status requires documentation of an EBP model. Hospitals that choose to work toward Magnet status undergo a journey, which is said to entail a cultural transformation, a process in which the organization and staff integrate new ideas and processes to achieve the criteria for this status, including EBP (American Nurses Credentialing Center, 2008; Bloom & Tilbury, 2007; McClure, 2005). Therefore, hospitals in varying stages of Magnet transformation achieve an intensified perspective into how nurses perceive, adopt, and implement EBP. This provides unit staff a unique opportunity in self-awareness to explore the understanding of how the unit culture constrains or facilitates nurses' ability to adopt EBP.

Purpose and Specific Aims

The purpose of this exploratory study is to understand salient cognitive beliefs and cultural assumptions that affect the emergence and maintenance of evidence-based nursing practice in the hospital setting. The objective of this research is to explore and articulate the interplay between individual nurse perceptions of EBP, his or her ability to engage in EBP, and his or her unit culture. The ultimate aim of this research is to identify specific interventions that can accelerate or assist the transformation toward EBP in additional acute care settings.

The specific aims are to:

- Describe nurses' perceptions of their unit culture.
- Describe nurses' perceptions of EBP.
- Describe nurses' perceptions of how they integrate EBP in daily patient care.
- Describe nurses' perception of the influence that unit culture has on their ability to integrate the three dimensions of EBP (research, patient preferences, and clinical expertise).
- Describe nurses' perceptions of the magnet journey and how the resultant organizational changes influence their practice, EBP engagement, and unit culture.

This study will research thoughts, perceptions, and experiences of individual nurses at various stages of the magnet journey to identify individual and unit cultural characteristics that are identified to influence successful implementation of EBP.

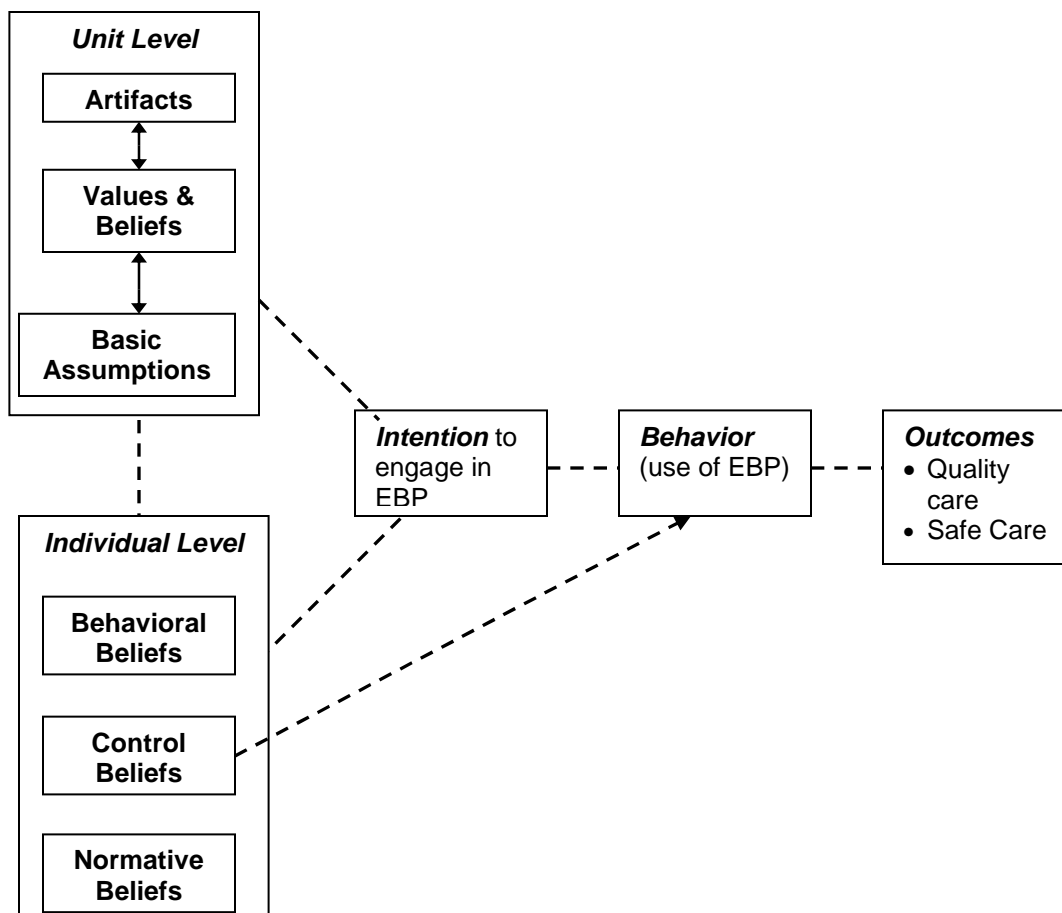
Qualitative methods will be used to uncover nurses' perceptions of their unit culture with a goal of integrating these observations with Ajzen's theory of planned behavior and Schein's organizational culture conceptual framework to formulate a more comprehensive theoretical framework. This integrated, multi-level framework will guide

future development of targeted interventions to facilitate and optimize EBP implementation and improve the safety and quality of care.

Theoretical Framework

The theoretical perspective guiding this study integrates Ajzen's (1988, 2005) theory of planned behavior and Schein's (2004) organizational culture conceptual framework (Figure 1). The theory of planned behavior has been used extensively to explain individual intention to engage in or actually perform health behaviors. For the most part, the theory of planned behavior's strength as an explanatory model rests with its clear explication of the relationship between individual beliefs and behavior. In contrast, Schein's organizational culture model offers a conceptually explicit picture of workplace culture, which acknowledges the development of an organizational level culture, as well as a multiplicity of subgroup cultures that develop at the workgroup level. Together, these frameworks provide a new multilevel conceptual orientation to explore the role of unit culture in the development and maintenance of evidence-based nursing practice.

Figure 1. Integration of Schein's (2004) Organizational Culture Conceptual Framework with Ajzen's (1988, 2005) Theory of Planned Behavior.



The theory of planned behavior is a social psychological theory that predicts and explains volitional and limited volitional controlled behavior in a specific context based on cognitive underpinnings (Ajzen, 1988, 1991, 2005). The theory postulates that a person's intention to engage in a behavior (or not to) is the immediate antecedent to behavioral action. Intention (or motivation) is the degree to which people are willing to try or how much of an effort they are planning to exert to perform the behavior (Ajzen, 1988, 1991, 2005). Intention is shaped by personal attitude, perceived behavioral control, and subjective norms, which are influenced by behavioral, control, and normative beliefs respectively. These beliefs do not need to be true; they may be inaccurate, biased, or irrational. Behavioral beliefs are personal in nature and they are determined by the

individual's positive or negative evaluation of the outcomes associated with the behavior. A person who believes that performing a given behavior will lead to mostly positive outcomes will hold a favorable attitude toward performing the behavior. Perceived behavioral control reflects the perceived sense of control, or self-efficacy, that the individual has over performing or not performing the behavior. Perceived behavioral control can both directly and indirectly influence behavior through intention. A person, who thinks they have the requisite resources and opportunities to perform a behavior and perceives fewer obstacles, will have greater perceived control over the behavior. Subjective norms represent a social influence or the perceived social pressure the individual feels to perform or not to perform the behavior. People, who experience social pressure to perform or not perform a behavior, will be motivated to act accordingly. Consequently, people intend to perform a behavior when they evaluate it positively, when they experience social pressure to perform it, and when they believe they have the means and opportunities to do so (Ajzen, 1988, 2005).

Assumptions of the theory of planned behavior include the supposition that people behave in a rational manner and that they take in available information and implicitly or explicitly consider the implication of their actions. The theory of planned behavior also assumes that the antecedents to intention, attitude, social norms, and perceived behavioral control, will vary in their importance in predicting intention and/or behavior. For example, in a study of intentions of nurses to work with computers, attitude and perceived behavioral control predicted intention to use a computer (Shoham & Gonen, 2008); whereas, subjective norms and perceived behavioral control predicted intention to use a hoist lift by healthcare workers (Rickett, 2006).

Individual decisions are often central to adoption of a clinical-related behavior such as EBP. However, these decisions are not made in isolation and might be influenced by the unit culture, which represents certain phenomena such as shared

values, beliefs, and basic assumptions that exert a powerful influence on individual beliefs and behavior. In this study, unit culture is defined as a pattern of basic assumptions, values, beliefs, norms, and shared meanings that a group develops to guide behavior and to solve its problems of external adaptation and internal integration and is defined, created, and transmitted through small group interaction (Fine, 1979, 2006; Harrington & Fine, 2000; Schein, 2004).

According to Schein (2004), culture at any level within an organization is viewed as manifesting itself in three hierarchical levels: 1) observable artifacts (what one sees, hears, and feels when entering an organization); 2) values and beliefs (the explicitly articulated norms, social principles, and ideologies that have intrinsic worth and importance in the organization); and 3) basic underlying assumptions (the deepest level or core culture, which provide expectations that influence perceptions, thoughts, and feelings about the organization). Artifacts are manifestations of values and beliefs, which are manifestations of basic assumptions. Artifacts, values and beliefs, and basic assumptions constantly shape each other in an iterative process. Schein (2004) also identifies six dimensions of organizational culture, which can help us better understand the culture. These dimensions are: 1) the nature of reality and truth, 2) the nature of time, 3) the nature of space, 4) the nature of human nature, 5) the nature of human activity, and 6) the nature of human relationships.

In summary, the theoretical underpinning of this study is that a person's decision to engage in EBP is shaped by their individual beliefs (behavioral, control, and normative), which influence and are influenced by the unit culture. This theoretical orientation posits that nurses, who believe that EBP is beneficial, perceive that they have the internal and external resources to perform EBP, experience social pressure to engage in EBP, and work in a practice environment that supports and encourages the use of EBP, are more likely to express intention to engage in EBP.

Chapter Two

Background and Significance

Evidence-Based Practice

The most commonly recognized definition of EBP is a decision-making process that integrates three key elements: (a) conscientious use of current best evidence, (b) clinical expertise, and (c) patient preferences in making clinical decisions to achieve optimal patient outcomes (Clarke, 1999; Closs & Cheater, 1999; Estabrooks, 1998; IOM, 2001; Kitson, 1997; Melnyk et al., 2000; Melnyk & Fineout-Overholt, 2005b; Mulhall, 1998; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Stetler et al., 1998). Best evidence refers to relevant patient-centered clinical evidence (research) that substantiates a chosen intervention. Clinical expertise is defined as the experiential knowledge and judgment gained as one practices in a discipline over time. Clinical expertise is central to EBP, as it allows for the integration of evidence with the third element, patient/family preferences in making a clinical decision. The EBP process, by incorporating patient/family preferences, makes the patient/family active participants in clinical decisions surrounding the patient's care. The EBP process de-emphasizes intuition, unexamined clinical experience, and pathophysiology in clinical decision-making; and it requires clinicians to develop a new set of skills (literature searching, critical appraisal and synthesis of the research, and integration of the evidence with their expertise and patient/family preferences) (Evidence-Based Medicine Working Group (EBWG), 1992; Guyatt, 1991; Jennings & Loan, 2001; Rosenberg & Donald, 1995; Scales, Preminger, Keitz, & Dahm, 2007).

There are five steps to the EBP process. The first step is to develop an important clinical question. The second step in the EBP process is to search for all relevant evidence. Critically examining the evidence for validity, generalizability, and applicability to the situation makes up the third step. Implementation of a decision or practice change

based on the integration of the best evidence with the clinician's expertise and the patient's preferences comprise the fourth step of the EBP process. The final step is to evaluate the decision or practice change that was implemented (Flemming, 1998; IOM, 2001; Melnyk & Fineout-Overholt, 2005a).

The Agency for Healthcare Research and Quality (AHRQ) provides a standard for assessing the quality of evidence. Levels of evidence are ranked from best to least: meta-analysis of randomized controlled trials (RCTs); one RCT; one controlled study without randomization; quasi-experimental study; nonexperimental descriptive studies; and expert consensus, opinions, or clinical experience of respected authorities (AHRQ, 2008). Currently, nurses' sources of evidence in their practice include their own clinical experience, the patient, and colleagues; whereas, nurses seldom use research-based journal articles to support their practice (Egrod, 2004; Estabrooks, Chong, Brigidear, & Profetto-McGrath, 2005; McKnight, 2006; Pravikoff, Tanner, & Pierce, 2005; Rolfe, Segrott, & Jordan, 2008; Thompson et al., 2001a).

Research Utilization

A gap persists between knowledge generation and its translation into practice. This gap has led researchers to study barriers and facilitators to research utilization. Until recently, most of the research relevant to EBP examined factors that influenced the implementation of research (evidence) in practice and theorized the integration of research into practice from the perspective of the individual practitioner. Although this body of research does not consider the role of clinician expertise or patient preferences, it offers important insights into consistent intra-personal and environmental barriers and facilitators to nurses' application of clinical research (evidence).

Commonly recognized barriers to research utilization by nurses range from individual nurse characteristics (negative attitude, resistance to change, and lack of knowledge and skill) to contextual barriers (lack of time, workload, lack of resources, and

lack of authority to change practice) (Fink, Thompson, & Bonnes, 2005; Funk, Champagne, Tornquist, & Wiese, 1991ab; McSherry, Artley, & Holloran, 2006; Micevski, Sarkissian, Byrne, & Smirnis, 2004; Rycroft-Malone et al., 2004). Perceived facilitators of research utilization by nurses also range from individual nurse characteristics (positive attitude) to contextual facilitators (accessibility of research, administrative and leadership support, and champions or mentors) (Fink et al., 2005; Funk et al., 1991ab; McSherry, et al., 2006; Micevski et al., 2004; Rycroft-Malone et al., 2004). A meta analysis on individual nurse characteristics that influence nurses' research utilization found only one significant relationship that influenced research utilization, and that was nurses' attitude toward research (Estabrooks et al., 2003a). This may be compelling evidence to prompt further exploration of how nurses form their attitude towards research utilization and EBP and how the unit culture influences attitude development. Despite knowledge concerning barriers and facilitators to research utilization, unknown is if the use of evidence increases when the perceived barriers are diminished (Carlson & Plonczynski, 2008). Further, consistent implementation of research utilization has not occurred suggesting that there may be other aspects that are important.

Clinical Expertise and Patient/Family Preferences

Aspects of EBP that have been less well studied may point the way toward the understanding necessary to achieve consistent EBP implementation. For example, the aspects of clinical expertise and patient preferences that define EBP have yet to be studied in similar detail as the use of evidence or research in practice. In addition, researchers are beginning to hypothesize that organizational and unit culture may play important roles in nurses' use of research (Estabrooks, 1999, 2003; Estabrooks et al., 2003a; Kitson, 1999; McCormack et al., 2002; Meijers, et al., 2006; Scott, S. & Pollock, 2008). Yet, the influence that the unit culture has on EBP remains an area for exploration.

This is supported by the fact that Foxcroft and Cole (2009) could not identify studies to include in a Cochrane review on organizational infrastructures that promote EBP. Foxcroft and Cole define infrastructure as the underlying foundation or basic framework through which care is delivered and supported. This infrastructure can take many forms such as culture at the geographic, hospital, and unit levels. In their systematic review, Mejjers and colleagues (2006) attempted to assess the relationship between contextual factors and research utilization. However, in their systematic review, they did not define culture or its unit of analysis. Ultimately, the number of studies, which were included in the review, was limited due to methodological limitations and equivocal results preventing Mejjers and colleagues from drawing any conclusions.

Nurses' Perceptions and Knowledge of EBP

Nurses, in general, perceive EBP as beneficial yet they have little knowledge of the tenets of EBP; and they have difficulty distinguishing it from research utilization (Melnyk et al., 2004; Banning, 2005). In 2008, Koehn and Lehman have assessed nurses' perception of their use of EBP along with attitudes and knowledge/skills of EBP in a descriptive, cross-sectional survey design. They measured EBP perceptions, knowledge, and skills using the Clinical Effectiveness and EBP Questionnaire, developed and psychometrically tested by Upton and Upton in 2006. However, this tool was developed based on a literature search of key factors influencing EBP and was not guided by a theoretical framework. Consequently, concepts were not defined and only two aspects of EBP: the use of evidence and expertise were measured (Upton & Upton, 2006). The survey was sent to all registered nurses (n=1031) including direct and non-direct caregivers, employed at a large medical center. The response rate was 40.9% (n=422). Items were scored on a scale from one to seven with seven indicating more positive attitude and better knowledge. Nurses rated their use of EBP (mean=5.21) and attitudes about EBP (mean=5.19) as moderate, while they rated their knowledge and

skills in EBP lower (mean=4.67) (Koehn & Lehman, 2008). This contradictory finding led the researchers to conclude that either the nurses did not understand the EBP terminology used in the instrument or the instrument requires further refinement and testing (Koehn & Lehman). Despite these findings, nurses' perception of EBP is an area that merits much closer scrutiny.

Role of Unit and Organizational Characteristics

Although the role of unit and organizational characteristics associated with the three components of EBP has not been well studied, there is some applicable literature in the area of research utilization and the hospital environment. Estabrooks, Midodzi, Cummings, and Wallin (2007) used secondary data to develop multilevel models to predict research utilization by nurses. Statistically significant predictor variables at three levels (individual, specialty, and hospital) were identified. The majority of variance in nurse reported research utilization was explained by individual level factors (87%) (Estabrooks et al., 2007). However, there were organizational factors that were statistically significant in predicting research utilization. Likewise, Cummings, Estabrooks, Midodzi, Wallin and Hayduk (2007) used secondary data and structural equation modeling to identify hospital- and unit-level influences on nurses' reported research utilization. Cummings and colleagues concluded that hospital-level characteristics (responsive administration and relational capital) influenced unit-level characteristics (staff development, staffing and support services, and nurse-to nurse collaboration) that influenced nurse reported research utilization. Limitations of both studies include: (a) analysis of data that was not collected for the specific aim of the study, (b) loosely defined hospital- and unit-level variables, and (c) self-reported dependent variables (use of research, patient adverse events, and staff adverse events). The authors of both studies recommended further research to identify and understand how factors in the culture, at various levels in the organization, influence individual

behaviors and to develop a consistent set of contextual measures that can be used across healthcare settings (Cummings et al., 2007; Estabrooks et al., 2007).

In addition, Pepler and colleagues (2006) qualitatively assessed how nurses in acute care units use research as a basis for their decision-making. The authors concluded that the unit leader plays a significant role in promoting the use of research. Leadership is recognized as essential for creating organizational change (Schein, 2004), but few researchers have explored the relationship between unit leadership and the adoption of EBP. Consequently, important dimensions of leadership that facilitate EBP adoption are unclear (Gifford, Davies, Edwards, Griffin, & Lybanon, 2007).

In their qualitative study of nurses' use of research in a pediatric intensive care unit, Scott and Pollock (2008) identified several relevant unit characteristics including, structure of authority, nature of nurses' work, and workplace ethos. A commonly cited barrier to nurses' use of research in the acute care setting is "lack of time," Thompson and colleagues (2008) explored the relationship between "busyness" and research utilization and identified that "busyness" as a complex concept that is influenced by the value of busyness in the unit culture and is not necessarily the physical time required to perform a task. The lack of study and understanding of the influence that the unit culture has on nurses' use of research is the basis for further expanded research as to how the unit culture shapes nurses behavior and their use of EBP.

Magnet Hospitals: A Window on the Emergence of EBP

Healthcare organizations that commit to becoming Magnet designated undergo a transformation at the organizational level. During this transformation, certain characteristics, such as leadership, autonomy (decentralized decision-making), control over practice, and nurse-physician collaboration are developed or strengthened. Research on Magnet hospitals confirms that the organizational context exerts a powerful influence on nurse behavior, but the linkages between organizational attributes, nurses'

behavior, and associated outcomes are not understood (Aiken, 2001; Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Aiken, Smith, & Lake, 1994; Aiken, Sochalski, & Lake, 1997). Magnet hospitals are expected to exemplify nursing excellence by promoting and supporting evidence-based nursing practice as well as by contributing to the development of new nursing knowledge through research (American Nurses Credentialing Center, 2008; Bloom & Tilbury, 2007; McClure, 2005). Given the lack of empirical evidence of the interplay between unit culture and individual behavior, such as EBP adoption, it is surprising that scholars have not studied the Magnet environment and how it influences nurses' behavior. This study will address this gap in knowledge by beginning to understand the relationship between unit culture and the evolution of EBP through the study of hospitals at different stages of the Magnet application and maintenance process.

Significance

Patients admitted to hospitals in the US expect to receive safe, effective, and quality care that is based on an evidence-based decision-making process, which incorporates the best evidence, patient preferences, and clinical expertise (IOM, 2001). Despite this call for EBP, medical errors continue to beset hospitals (IOM, 1999); care is inconsistent (IOM, 2001); and the quality of care in the nation's hospitals has improved at a glacial speed over the past decade (US Department of Health and Human Services [HHS], 2009). Although there is sufficient evidence to support the use of EBP, it is not consistently performed by nurses. It is not understood why this inconsistency exists. However, it is known that it contributes to missed opportunities, preventable events, and injuries. Overall, the inconsistent use of EBP compromises patient safety and quality of care.

Organizational culture has been acknowledged as playing a significant role in shaping behavior. Yet, there is little empirical evidence regarding the influence that the

unit culture has on nurses' behavior in general, let alone regarding their engagement in EBP. Magnet hospitals are required to demonstrate that nurses practice within an EBP framework. However, it is unknown how this requirement is accomplished and maintained. Achieving the goal of implementing EBP requires both an individual and organizational effort – either alone is insufficient to achieve the reform called for by the IOM and other major healthcare organizations.

Chapter Three

Research Methodology

Research Design and Methods

This study used a qualitative design to describe and understand how the unit culture that evolved during the Magnet journey influenced nurses' cognitive beliefs and behavior concerning the three dimensions of EBP. Qualitative methods were used to uncover the role of the unit culture, and at the same time, to explore the process by which nurses engaged in EBP and how the interplay between the unit culture and individual behavior was demonstrated (Creswell, 2007; Marshall & Rossman, 1989; Miles & Huberman, 1994; Tripp-Reimer & Doebbeling, 2004; Schein, 2004).

In-depth semi-structured interviews were used to uncover the processes by which nurses understood and implemented EBP. This method provided the ability to explore concepts within the theoretical framework detailed above. Semi-structured in-depth interviews provided rich data on individuals' perception and their experiences. This technique also provided flexibility to the researcher to adapt questioning to the participant's understanding of the topic under discussion and to elicit participant's beliefs, opinions, and values (Creswell, 2007; Miles & Huberman, 1994; Price, 2002; Weiss, 1994). In-depth interviewing provided a way to access participant's cognitive models, which informed their perspective of their environment and guided their behavior. Potential limitations to in-depth interviewing include the participants' reluctance to respond or to provide an inaccurate or incomplete recollection of the situation. Most experts agree that in-depth interviewing is a more than adequate method for exploratory research (Marshall & Rossman, 1989; Weiss, 1994).

The principles of analytic ethnography (Lofland, 1995; Lofland, Snow, Anderson, & Lofland, 2006; Snow, Morrill, & Anderson, 2003) were used to clarify concepts, to elucidate their relationships to each other, and to explore the theoretical constructs of

the theory of planned behavior integrated with organizational culture concepts. Analytic ethnography incorporates both a deductive and inductive process that seeks to refine or extend an existing theoretical framework and is open to the possibility of theory discovery. Analytic ethnography was pertinent for this study because it allowed the testing of the core features of the integrated theories as well as revising those existing theories in light of new data. Data were analyzed using a multistep process to identify common themes that were informed by the theoretical framework, as well as themes which arose from the data itself, and which might not have been anticipated by the theoretical framework (Lofland et al., 2006; Snow et al., 2003); it also involved an (Hupcey, 2005; Lofland et al., 2006; Mays & Pope, 1995; Miles & Huberman, 1989).

Setting, Recruitment, and Sample

Setting. In keeping with the principles of analytic ethnography, the selection of the hospitals and units were based on purposive sampling and theoretical concerns (Lofland et al., 2006; Snow et al., 2003). The hospitals for this study consisted of a Magnet journey hospital and a Magnet designated hospital in a major metropolitan area in the Southeast. The Magnet journey hospital (MJH) and Magnet designated hospital (MH) were located in different urban settings within this metropolitan area. Permission to enter both hospitals was granted by each hospital's Chief Nursing Officer.

Two adult units (medical-surgical and critical care) from each hospital comprised the sampling frame. The selection of the two units was purposive to assure that the concepts under study were present (Charmaz, 2006; Marshall & Rossman, 1989; Miles & Huberman, 1994; Lofland et al., 2006). A Nurse Administrator at each hospital identified the units to be included in the study based on the achievement of certain criteria. Unit selection criteria included the extent to which the unit engaged in EBP, implemented quality improvement efforts, and utilized a shared governance decision-making structure. The extent to which each unit had implemented these criteria was

assessed on a continuum from lack of implementation to exemplary implementation. Nurse Administrators were asked to select one unit that displayed a moderate, or halfway achievement in that they had a way to go, and the other exemplary achievement of the criteria. The two units that were studied at the MJH consisted of the combination of two medical-surgical telemetry units (MJH MS unit) and the medical-surgical Intensive Care Unit (MJH ICU). The two units that were studied at the MH consisted of the medical-surgical-oncology unit (MH MS unit) and the medical-surgical Intensive Care Unit (MH ICU). See Table 1 for hospital demographic details.

Table 1. Hospital Demographics

Hospital & Unit	Hospital Size	Unit Size	Teaching Status	Type	Location
MJH MS	322 beds	40 beds	Non-teaching	Non-profit	Urban
MJH ICU	322 beds	16 beds	Non-teaching	Non-profit	Urban
MH MS	524 beds	44 beds	Family Medicine Resident teaching site	Non-profit	Urban
MH ICU	524 beds	18 beds	Family Medicine Resident teaching site	Non-profit	Urban

Each hospital underwent significant organizational or management changes during the course of the study. The MJH was purchased by a non-profit hospital system and staff was informed of the pending purchase in May 2010, which was just prior to the fifth interview at that facility. The formal purchase date was in September 2010 and six interviews were completed thereafter. The MH staff was notified in August 2010 that the Chief Operating Officer (COO) was transferring to a different hospital within the system and, effective January 2011, they would have a new COO. All nurses at the MH were interviewed with this knowledge.

During data collection, no changes were made to the nursing management structure from the Nurse Manager level and above at both hospitals. However, the MJH MS unit experienced the resignation of their day-shift charge nurse, also known as the

Team Leader, in August 2010. The majority of interviews were completed prior to this change; however, one nurse from this unit was interviewed after this transition. The MH MS unit also encountered the loss of two day-shift charge nurses (in December 2010 and February 2011), known as Clinical Nurse Level 3. The majority of interviews were completed prior to this change; however, one nurse was interviewed after the first Clinical Nurse Level 3 resigned and two nurses were interviewed after both resignations.

Recruitment and sample. Nurse interviews were conducted from April 2010 to March 2011. Prior to initiation of recruitment of participants, approval for working with human subjects was obtained from the Institutional Review Boards (IRB) at Emory University (IRB00028646, Appendix A) and both hospitals. Recruitment of nurses involved the posting of nurse recruitment posters (Appendix B and C) on each unit soliciting voluntary participation in the study. In addition, the Principal Investigator frequently came to the units and met with nurses to solicit their voluntary participation. The researcher had obtained approval to send an email or letter (Appendix D) to all nurses assigned to the four units to solicit their voluntary participation but this mechanism was unnecessary. During onsite recruitment, nurses were informed that they would be offered \$50 in consideration for their time. Interviews occurred at a time and location that was convenient for the participant.

Purposive sampling was used to select nurse participants. Purposive sampling was done to assure that participants had been exposed to EBP and its implementation and would be able to provide rich, thick data that could be qualitatively analyzed (Charmaz, 2006; Marshall & Rossman, 1989; Miles & Huberman, 1994; Lofland et al., 2006). Nurses, to be included in this study, met the following criteria: (a) worked one year on their respective unit, (b) provided direct patient care primarily during the week (Monday through Friday), and (c) worked a minimum of 16 hours per week on the day and/or evening shifts. These criteria helped assure that nurses had an understanding of

the unit culture and were able to articulate the shared values, beliefs, and basic assumptions concerning EBP during an interview. As the study progressed, theoretical sampling was used to seek pertinent data to further advance emerging concepts and to fill in the identified gaps (Charmaz, 2006; Creswell, 2007; Miles & Huberman, 1994). Maximum variation in the sample was assured by actively seeking contrary cases so that main patterns could be confirmed or disconfirmed (Miles & Huberman, 1994). The nurse inclusion criteria coupled with the purposive sampling at all levels, helped assure that the phenomena of interest was present, that nurses mastered the “task” of the job (Benner, 1984), and that nurses had a comprehensive understanding of their environment.

All nurses met inclusion criteria, except for one MH MS unit nurse. This nurse had eight and a half months nursing experience on the unit in addition to working as a nurse technician for three and a half years on the same unit. In light of this nurse’s combined years of experience (four years) and given the difficulty recruiting nurses from this unit that fit inclusion criteria, it was decided that this prolonged exposure to the unit culture was sufficient to include this nurse.

The sample of nurses from the MJH consisted of 20 nurses (see Table 2). Additional participants were solicited due to changes in the interview guide. The revised interview guide was used and further revised with the remaining participants in both units. Saturation was reached by the eighth interview in both MJH units; that is, no new confirming or contradictory information emerged during analysis (Charmaz, 2006; Creswell, 2007; Miles & Huberman, 1994; Polit & Beck, 2006). The remaining two interviews were confirmatory. The MJH nurse interviews occurred at a location and time that was mutually convenient and lasted in length from 52 minutes to 144 minutes with an average of 92 minutes.

The sample of nurses from the MH consisted of 15 nurses (see Table 2) and all were interviewed using the revised interview guide, which continued to be refined

throughout data collection. Data collection ceased when saturation occurred, which happened at seven and eight participants from the MS unit and ICU, respectively. The MH nurse interviews occurred at a location and time that was mutually convenient and lasted in length from 55 minutes to 96 minutes with an average of 75 minutes.

Overall, the majority of participants from all units were women; however, the MJH ICU had a greater number of men than any unit. The majority of the nurses participating in this study held Associate Degrees in Nursing (54%). Surprisingly, all units, except the MH MS unit, which had one baccalaureate-prepared nurse, had about fifty percent of participants holding a Baccalaureate Degree in Nursing. The national average of nurses by degree are: “16% Diploma, 37% Associate, and 47% Baccalaureate” (US Department of Health and Human Services Human Resource and Services Administration [HHS HRSA], pg. 59, 2010). The percentage of baccalaureate-prepared nurses tends to be higher at 59% in Magnet-designated hospitals (American Association of Colleges of Nursing [AACN], 2011); however, the sample for this study did not conform to the national averages of expected education for both hospitals regardless of Magnet designation. There tended to be more years of experience and longevity in both units in the MH as compared to the MJH. Overall, most of the nurses were employed full-time. Nurses from the MJH talked, on average, 14-20 minutes longer than their counterparts in the MH.

Table 2. Participant Demographics ($n = 35$)

		MJH MS <i>n</i> = 10	MJH ICU <i>n</i> = 10	MH MS <i>n</i> = 7	MH ICU <i>n</i> = 8
Gender	Female	8	6	7	7
	Male	2	4	0	1
Education	Diploma	0	1	0	0
	ASN	5	4	6	4
	BSN	5	5	1	4
Average	Yrs experience	11.2	7.5	7.6	13.9
	Yrs at hospital	8.2	4.3	7.1	11
	Yrs on unit	2	2.3	3.7	8.2
Status	PRN	1	3	1	0
	Part Time	3	0	0	1
	Full Time	6	7	6	7
Interview Length (minutes)	Range	71-129	52-144	57-96	55-96
	Average	97.2	85.1	78.9	71

Data Collection

Once eligibility was confirmed, the Principal Investigator initiated the informed consent process with participants and used their respective hospitals' IRB approved consent form (Appendix E and F). The aim of this study was to elicit nurses' perception about three key concepts – unit culture, EBP, and the influence that the magnet process had on what occurred at the unit level. In this study, unit culture was defined as a pattern of basic assumptions, values, beliefs, norms, and shared meanings that a group developed to guide behavior and was defined, created, and transmitted through small group interaction (Fine, 1979, 2006; Harrington & Fine, 200; Schein, 2004). The concept of EBP was defined as the integration of the current best evidence, clinical expertise, and patient/family preferences when making clinical decisions in order to achieve optimal patient/family outcomes (Clarke, 1999; Closs & Cheater, 1999; Estabrooks, 1998; IOM, 2001; Kitson, 1997; Melnyk et al., 2000; Melnyk & Fineout-Overholt, 2005b; Mulhall, 1998; Sackett et al., 1996; Stetler et al., 1998). The concept of magnet process/designation was defined as the changes that occurred at the hospital level,

which in turn influenced what, transpired at the unit level in order to achieve or maintain magnet designation.

A semi-structured interview guide was used to direct the interview (Appendix G). This approach provided the necessary flexibility to adapt questions to the participant's understanding of the topic and provided direction to the interview (Miles & Huberman, 1994; Price, 2002; Weiss, 1994). It also allowed comparisons to be made across subjects and units so that generalizations could be made to theoretical constructs (Miles & Huberman, 1994). The interview guide was developed to elicit aspects of the theory of planned behavior, organizational culture concepts, and the magnet journey as they related to EBP. The interview guide was continuously refined after each interview; however, it underwent two major revisions. The first revision occurred prior to the start of this study. The interview guide was pilot tested and found to be too narrow in its focus. Questions were broadened and made more open-ended. The second major revision occurred during data collection (Appendix H). The questions were similar in the different versions, but were made more open and easier for the participant to answer in the revised interview guide.

The interview guide consisted of four segments. The first segment included demographic questions concerning education, number of years worked as a nurse, and tenure in their current position. The rest of the interview guide focused on the three main concepts in the study (unit culture, EBP, and magnet journey/designation). In the next segment of the interview, participants were asked to describe a typical day, which included overall work responsibilities, how things get done on their unit, and the values, beliefs, and norms that drive care delivery. General open-ended questions and more in-depth probes were used to elicit examples that illustrated perceptions of unit culture. The third segment of the interview focused on the three dimensions of EBP – evidence, clinical expertise, and patient preferences, and how these dimensions influenced or

informed their clinical decision-making. Questions were framed to uncover connections between unit culture and each nurse's actions and behaviors. Finally, in the fourth segment, questions explored the influence that the magnet journey or magnet designation had on their practice, ability to engage in EBP, and the unit culture.

The Principal Investigator conducted all interviews at a time and location convenient to the participant. Each nurse interview was audio recorded. Immediately following each interview, the researcher recorded her reactions, thoughts, feelings, insights, and any unanticipated topics that arose (Miles & Huberman, 1994). The researcher or a professional transcriptionist transcribed the audio recordings. The researcher verified all transcribed interviews, and once this was completed, the audio recording was destroyed. Transcribed texts were analyzed with the support of Atlas.ti version 6.2 (2009) which assisted in data organization and retrieval. Each participant was assigned a pseudonym in efforts to protect their identity, and this pseudonym was consistently used to refer to this nurse's perceptions.

Data Analysis

Data analysis was guided by the principles of analytic ethnography (Lofland, 1995; Lofland et al., 2006; Miles & Huberman, 1994). The goals of analytic ethnography are to extend and refine existing theory while being open to the emergence of new theory. This was accomplished through an iterative deductive and inductive process, which employed a constant comparative method (Lofland et al., 2006; Snow et al., 2003). To provide analytic depth, data analysis followed a systematic multi-step process (open, analytic, and conceptual coding) where data were coded multiple times. Data analysis software (Atlas.ti 6.2) was used during this process.

Data analysis began after the completion of the first interview. The simultaneous collection and analysis of data continued throughout the study. Initially, interview data were open coded using some deductive codes, which were developed from the

conceptual framework while also allowing for inductive codes to emerge from the data (Hsieh, 2005; Marshall & Rossman, 1989; Miles & Huberman, 1994). During initial open coding, data were critically assessed for hidden meanings; the how, when, and why people act; and for tacit assumptions (Charmaz, 2006; Miles & Huberman, 1994). The researcher used memos to clarify findings, identify gaps in the data, develop and fill out the code, and identify beliefs and assumptions (Charmaz, 2006; Miles & Huberman, 1994). Also, the researcher consistently compared like codes between individuals and within the same individual at different time points; this helped to focus the data.

As coding progressed, the process moved to analytic coding where categories and subcategories were developed by inductively and iteratively sorting categories into clusters (Hsieh, 2005; Miles & Huberman, 1994). Themes began to emerge from the data and the researcher memoed to capture thoughts regarding how these themes emerged along with her assumptions and beliefs. At this point, a more defined coding matrix emerged (Appendix I) and coding and recoding at the open and analytic levels continued. Also, the added focus in data analysis guided further data collection. The researcher employed theoretical sampling to collect data to clarify emerging concepts and to seek contrary cases to confirm or disconfirm emerging concepts. This was accomplished by asking participants for people who thought differently than themselves and who might be interested in participating.

Coding then progressed to the conceptual level. At this level, the researcher raised the categories to concepts and hypothesized propositions among the concepts in order to summarize the data into an explanatory framework. Unit cultural factors and individual cognitive beliefs were identified that influenced the nurses' ability to engage in EBP. Also, data analysis was guided by strategies suggested by Miles and Huberman (1994), which included building data matrices and context charts. See Appendix J for abbreviated Data Summary Matrix for the MJH MS Unit and Appendix K for MH ICU

Context Chart. During this level of coding, the researcher continued to memo how concepts were developed and related.

Credibility or trustworthiness (validity) of the data was addressed via the constant comparative method that the researcher employed to constantly verify findings and to search out contrary cases that supported alternative explanations. When evidence to support alternate explanations could not be found, the researcher had increased confidence that the theory had been refined or extended in light of the data (Devers, 1999; Patton, 1999; Yin, 1999).

Dependability (reliability) was addressed through the creation of an audit trail and inter-coder agreement (inter-rater reliability) (Devers, 1999; Mays & Pope, 1995; Miles and Huberman, 1994). The audit trail was established through the memos that were written. The memos provide transparency to the data analysis process as well as providing the needed information to replicate the study. Since the researcher was a neophyte qualitative researcher, she met frequently with an experienced qualitative researcher who reviewed interview techniques, codes, and concepts and provided feedback in efforts to assure reliability (Mays & Pope, 1995; Miles & Huberman, 1994).

Biases, Risks, Benefits, and Confidentiality

Multiple efforts were employed during this study to reduce biases and risks while simultaneously increasing benefits and assuring confidentiality for participants. The ability to obtain information during in-depth interviewing is largely dependent upon building and maintaining a good interpersonal relationship between the researcher and participant (Clarke, 2006; Weiss, 1994). The researcher established a personal relationship with the participant by exhibiting trust, empathy, and genuine interest in the participant. The researcher-participant relationship was maintained throughout each interview, with the explicit aim of eliciting information that was useful to the study from the participant; additionally, the researcher did not provide advice to participants so that

the participant might misconstrue the interview to be therapeutic (Clarke, 2006; Eide & Kahn, 2008; Weiss, 1994).

Engaging in dialogue as a method of data collection can, on rare occasions, elicit distressing emotional reactions on the part of the participant both during and after the interview, and it can lead participants to reflect on their life and consequently make changes (Clarke, 2006; Eide & Kahn, 2008; Weiss, 1994). The subject matter of this study was not anticipated to be psychologically sensitive in nature. However, the researcher ensured that the participant was not harmed during and after the interview by being sensitive to the participant and maintaining confidentiality. No participant became emotionally upset or distressed as a result of the interview.

Researcher attributes, such as race, age, sex, social background, dress, and demeanor, might influence the researcher-participant relationship. The researcher had a wealth of experience in the acute care setting and worked in various positions. In addition, the researcher taught in a baccalaureate-nursing program. These experiences facilitated the researcher's understanding of the nurses' environment. Other researcher attributes also influenced the researcher-participant relationship. There are many attributes and experiences that the participant could react to, and given this multiplicity, the researcher was considered an insider in some ways, an outsider in others.

The researcher continually acknowledged and bracketed her beliefs, values, and potential biases in order to lessen the potential influence they might have on the entire research process (Lofland et al., 2006; Miles & Huberman, 1994; Weiss, 1994). Additionally, the researcher engaged in reflexivity, a well-known mechanism used to reduce potential ethical issues that are inherent in the researcher-participant relationship. This involved a heightened awareness to subtle shifts in personal interactions during the interview and heightened awareness of the role the researcher had in the research process (Clarke, 2006; Guillemin & Heggen, 2008).

There were no foreseeable risks or physical harm associated with this study. The main risk in this study was a potential break in confidentiality, anonymity, or privacy. To reduce this risk, all identifying information attached to the interview data was removed. This entailed the use of pseudonyms for each participant and for peers or patients the participant might have named during the interview. In addition, the professional transcription service that was used to transcribe interviews, signed a confidentiality agreement. After the audio recording of the interview was transcribed and verified, it was destroyed. A computerized log was generated and was the only record, which connected the participant to their pseudonym. The electronic files of the interviews and log were stored on a password protected secure server as well as on a flash drive. The flash drive was stored in a locked cabinet. Also, the signed informed consents were stored in a locked cabinet. Members of the researcher's dissertation committee only had access to de-identified data.

Participants did not benefit personally from participating in this study. However, some participants might have felt good because someone listened to them. Additionally, they might have gained insight and learned about themselves and/or their environment during the interview. The information that participants provided will advance the understanding of how the unit culture influences individual's beliefs and behavior as they relate to the adoption of EBP.

Chapter Four

Nurses' Cognitive Beliefs Concerning EBP

The principal aim of this exploratory study is to discover individual nurse beliefs and unit cultural characteristics, which emerge during the Magnet journey and facilitate implementation and maintenance of EBP. The framework for this study is multilevel with individual behavior explained by Ajzen's (1988, 2005) theory of planned behavior (TPB), which has a reciprocal relationship with the unit culture, in that as unit staff solve problems, they create values and basic assumptions that further influence individual beliefs, attitudes, and behaviors, which further solidifies values and assumptions (Schein, 2004). This chapter will discuss nurses' perception of individual beliefs that influence EBP adoption and maintenance, while Chapter Five will discuss nurses' perception of unit cultural factors. Finally, Chapter Six will discuss how the theoretical framework for this study is illuminated by these findings.

Concept Review

The framework guiding this study is multilevel and includes the interplay between individual beliefs and behaviors with the unit culture. At the individual level, according to the theory of planned behavior, there are three cognitive beliefs that influence behavior: behavioral, control, and normative. Behavioral beliefs are how favorable the person views the outcome of the desired behavior. Control beliefs are beliefs about the presence or absence of factors that impede or facilitate the person in performing the behavior. These beliefs may be based on experience with the behavior or by other factors that improve or diminish the perceived difficulty of performing the behavior. The last belief, normative, is social in nature and consists of social pressure to perform the behavior from various referent groups. The importance of each belief varies from individual to individual, or from one population to another. For some behaviors, there

may only be one or two beliefs that are important whereas for other behaviors all three beliefs may be important.

Organizational culture is a multidimensional and multilevel concept; however, this study focuses on the unit culture and its influence on individual beliefs and behavior. Unit culture, in this study, is defined as the values, beliefs, and basic assumptions that are developed and maintained as the work group solves problems, which in turn influence attitudes and behavior of individuals in the work group (Fine, 1979, 2006; Harrington and Fine, 2000; Schein, 2004). Values and beliefs are explicitly articulated norms and reflect what ought to be. Values and beliefs are negotiable and are transformed into basic assumptions once they have reliably solved the group's problems. Basic assumptions are taken for granted and there is little variation within the work group; the degree of consensus results from repeated success in implementing certain values and beliefs while solving problems. Basic assumptions guide behavior and tell people how to perceive, think, and feel about things. They are shared and mutually reinforced and help people to make sense of their environment.

The dependent variable of interest in this study is nurses' perceived adoption and maintenance of EBP. EBP, for this study, is defined as a process that integrates three key elements: (a) conscientious use of current best evidence, (b) clinical expertise, and (c) patient preferences in making clinical decisions to achieve optimal patient outcomes (Clarke, 1999; Closs and Cheater, 1999; Estabrooks, 1998; IOM, 2001; Kitson, 1997; Melnyk et al., 2000; Melnyk and Fineout-Overholt, 2005b; Mulhall, 1998; Sackett, Rosenberg, Gray, Haynes, and Richardson, 1996; Stetler et al., 1998). Best evidence refers to relevant patient-centered clinical evidence (research) that substantiates a chosen intervention. Clinical expertise is defined as the experiential knowledge and judgment gained as one practices in a discipline over time. Clinical expertise is central to EBP for it allows the integration of evidence with the third element, patient/families'

preferences in making a clinical decision. The EBP process, by incorporating patient/families' preferences, makes the patient/family an active participant in the clinical decisions surrounding their care.

Findings from this study will be presented in the following manner. Data presented in this chapter consists of nurses' cognitive beliefs towards important concepts that influence EBP adoption and maintenance. Individual nurse beliefs will be presented under the appropriate cognitive beliefs defined in the theory of planned behavior. After specific cognitive beliefs are presented, examples of nurses' perceptions, which had multiple cognitive beliefs, will be presented. Chapter Five will consist of nurses' perceptions of unit level factors that influence EBP adoption and maintenance. These perceptions will be presented as basic assumptions that cluster to cultural dimensions that are defined by Schein's organizational culture framework. Finally, Chapter Six will discuss how the theoretical framework used in this study is illuminated by these findings. Additionally, Chapter Six will discuss the limitations of the study and the next steps in this line of inquiry.

Behavioral Beliefs

Behavioral beliefs, according to the theory of planned behavior, relate to the perceived consequences of the behavior. "Each behavioral belief links the behavior to a certain outcome, or to some other attribute such as the cost incurred by performing the behavior" (Ajzen, 200, pg. 123). The theory of planned behavior posits that people who perceive that performing a behavior results in mostly positive outcomes, will hold a favorable attitude towards performing the behavior and are more likely to engage in the behavior.

The target behavior in this study is nurses' use of EBP. EBP as defined in this study is a clinical decision-making process that integrates three dimensions: (a) use of evidence or research, (b) patient/family preferences, and (c) nurse's expertise. Nurses'

behavioral beliefs that influenced their adoption and/or maintenance of EBP were assessed. Important behavioral beliefs for the nurses to adopt and maintain EBP related to the following dimensions: (a) EBP, (b) changes/improvements in practice, and (c) informing and involving the patient/family in care decisions.

Behavioral beliefs towards EBP. The majority of nurses from all units held the behavioral belief that engaging in EBP would produce a desirable outcome and is something that should be done. According to the theory of planned behavior this means that they believed the outcome of using EBP was beneficial. This behavioral belief was reflected in their perceptions of EBP.

All nurses who expressed a perception of EBP defined it as the use of some type of information in practice. This information included evidence or research, hospital improvement data, or information gained from experience. No nurse in this study perceived EBP the way it was defined in this study with the three dimensions (evidence, expertise, and patient/family preferences). Additionally, there were differences in how EBP was perceived across units.

The majority of nurses from the MJH MS unit perceived EBP to be practice that is based on research, has a predictable outcome, and is the method of choice. EBP for this unit was more in line with what is known as research utilization or the use of research in practice. The nurses' perception of EBP in this unit connoted a sense of something that occurs outside of the nurse and it is the "thing to do" but they did not mention that they did it. For example, Lucy shared that EBP was "based on a collection of data and that outcome this is the goal that we can anticipate." According to Cindy, "evidence" informs practice and it was the "thing" to do, "based on their research, evidence shows that this is the way that things should be directed. Researched practice that seems to be the best way to go." Mary also perceived EBP to be "practice" that was based on "things that are

proven” multiple times; “it is a practice of things that we do based upon things that are proven over and over again. It’s tried and true and then it’s put into practice.”

The MJH MS unit was the only unit where a couple of nurses expressed some concerns regarding the quality of research. The concerns expressed by two nurses included a suspicion that research did not always find something although the researcher shared that there were “significant” findings. This was supported by Chris sharing, “research will always find something but it may not be as significant as they say it is.” The other concern expressed was that nursing research was “not of the same” quality as medical research, because nurses did not routinely perform randomized control trials. This was supported by the following:

And nursing is not new. Evidence-based practice, they’ve been saying a lot that it is with their own studies; but it is the type of studies that they do that unfortunately gives them a bad name. I mean it’s just nursing, but...doctors use experiments or because of understanding the body and experiment with that and what medications that they’re actually taking and how it affects through levels, blood work, and how this works. But in nursing, it’s different; it’s not the same evidence-based. There’s this one where there’s a study is simple; you need to flush with saline or heparin. So, that’s a good nursing-based study. Does it clot off the same, or what should we be doing? Then they establish that. (Grace, MJH MS).

A nurse from the MJH MS unit, Silvia, perceived that EBP was different for physicians and nurses. Silvia shared that medicine’s evidence was “scientifically a fact” and care should be “done this way.” However, Silvia viewed nurses’ evidence to be based on their “experience” and what they know “works” and not on scientific fact:

And to me it’s [EBP], the research that they have done somewhere along the line to figure out that not Pepcid, but what do you call it? Protonix stops the stomach from making an ulcer and that all low molecular weight heparins help not make a blood clot. So it’s the same thing; it’s medically proven; it’s scientifically a fact that it works best this way and so it should be done this way. ... And I’ve seen things and I’ve experienced things and you have a lot of knowledge - what do they call it - I can’t think of the terminology - where you base your nursing on what in the past is proved this is what works or what doesn’t work. It’s based on your experience, but they call it something now; the new terminology and that’s what I can’t think of. Evidenced-based nursing, it’s my evidence - I know it because I’ve been doing it for a hundred years!

Similar to the nurses from the MJH MS unit, the majority of nurses from the MJH ICU also perceived EBP to be practice that was “based on research” and it was “effective” or “works the best.” This conforms to the definition of research utilization, which is the use of evidence in practice. Analogous to the nurses from the MJH MS unit, the MJH ICU nurses did not verbalize that they did this on a daily basis. For instance, Dawn shared that EBP was “providing safe care based on current research and current trends in nursing.” Ricki perceived that EBP was based on “certain studies done and it shows that it’s effective, then it’s okay to do.” Bob added that EBP was, “going on the best study, basing practice on the studies that have a high sample rate; and then it’s confirmed in multiple studies, and it is the best practice.” Sarah viewed EBP as “something that is being done outside; something that has been researched over and over that’s put into practice. ... This is what works.” In addition, one nurse in this unit had no idea what EBP was.

In the MH, there was a shift in perception of EBP from research “that proves a practice is effective” to an active perception of “this is what we do.” Nevertheless, nurses from both hospitals defined EBP in accordance with research utilization and its narrow focus on the use of evidence in practice.

The majority of nurses from the MH MS unit perceived that EBP was based on “research.” One nurse perceived that EBP was based on hospital improvement data and another nurse perceived that it was based on experience or what “we have learned from past situations.” The common theme among the MH MS nurses was the perception that EBP “is what they do” no matter the source of information. For example, Cathy shared that EBP was “pretty much everything that we do. I mean, if they find something else changed, and they have evidence that that’s what works for the majority of patients or care or treatments. And that’s how we care for our patients.” Paige’s perception was similar, “EBP is something that has been proven to be effective, and it’s...a practice that

is incorporated into your plan of care that has shown to help the patient.” According to Marcy, “Oh, evidence-based practice, well basically everything that you do is evidence-based. You just constantly have to have education, standards, and examples of everything you’re doing. Like what, what else, everything really, it’s really everything.”

The majority of nurses in the MH ICU also perceived EBP to be practice that was based on research. In addition, one nurse perceived it to be based on hospital improvement data. In this group there was even less variance among participants as to what EBP was, and they unanimously viewed EBP as the way they provided care. Following the standard or evidence is expected in this unit and will be further explored in Chapter Five as a basic assumption. Ethel shared, “We use evidence-based practice; we’re all at the standards.” According to Jill, EBP “drives” their practice, “We try, and incorporate our practice according to what is evidence-based. And that’s a big part that drives multidisciplinary rounds. What’s been proven to be the right thing and true and so we try and incorporate that.” Angela shared her perception of EBP, “If a patient comes in, and you do this, this, and this, then you can eliminate future problems; and it’s all done for every patient, no matter what. Then that will improve the quality of the care and not cause additional problems.”

Summary of behavioral beliefs towards EBP. Overall, the majority of participants defined EBP, as the incorporation of some type of information into practice and following these recommendations was beneficial. The use of research in practice is also known as research utilization. Frequently, the concepts of EBP and research utilization are used interchangeably in the literature, which could lend support to the finding that no nurse defined EBP with its three dimensions.

Nurses from the MJH perceived that EBP was effective and should be done. However, they did not routinely mention that they did this. In contrast, the nurses from the MH perceived that EBP was what they did on a daily basis. The MJH MS unit had

the most variation in perceptions of EBP. Two nurses voiced concerns about the quality of research and one nurse perceived a difference between nursing and medical evidence, with nursing evidence explicitly being experience. The MH nurses had less variation in perceptions of EBP. Following evidence-based guidelines was an expected behavior at the MH and this will be discussed in Chapter Five.

Behavioral beliefs towards changes/improvements in practice. Engaging in EBP compels the nurse to change or improve their practice to incorporate new evidence or research as it is discovered. EBP, as defined in this study, also incorporates patient/family preferences in care decisions. Incorporating these preferences requires the nurse to make changes to the plan of care as the illness episode evolves. Given the significant role that changing or improving practice has in EBP, nurses' behavioral beliefs towards change is central to their adoption and maintenance of EBP. Looking at how nurses view change in general, as well as their views of specific changes or improvements that they have encountered, provides an opportunity to assess their behavioral beliefs toward changing or improving practice. Nurses' behavioral beliefs towards change or improvement varied across all units in this study.

The majority of nurses interviewed from the MJH MS unit and ICU perceived that, in general, change did not happen easily on their unit. Both units implemented specific changes during the study. Some of the changes were evidence-based and some were not. Nurses expressed mostly negative behavioral beliefs towards both change in general and the specific changes. In addition to the behavioral beliefs expressed towards the change, nurses from these units perceived that normative and control beliefs also influenced their behavior. Since nurses perceived that multiple cognitive beliefs influenced their ability to adopt the change, the examples from the MJH units will be presented at the end of the chapter after individual beliefs are presented and explained.

Conversely, nurses from the MH held two behavioral beliefs towards change: (a) changes or improvements to practice benefited the patient/family and (b) changes or improvements to practice benefited the nurse. Of the MH MS unit nurses who talked about change in general terms, some perceived that change was difficult and some perceived that change was easy. The behavioral belief present in the nurses' perceptions was related to their perceived benefit from enacting the change. If the behavioral belief was negative, or that they perceived that the change did not benefit them, then change was perceived to be difficult. In contrast, of the nurses who perceived that change was easy, the key behavioral belief was that they could influence the outcome and make it better. Being involved in the change process was perceived to be a vital behavioral influencer and will be explored in Chapter Five. Marcy was one nurse who perceived that change was difficult on the unit. She perceived that nurses did not want to change and this reflected the nurses' belief that the change was not beneficial for them and it took too much effort to implement the change:

Everyone hates change, but then you get used to it. ... There's nothing easy about change here; let me tell you that. Making it hard is just the fact that people are stuck in their ways; they don't want to change. They don't want to, plain and simple. They see something and no, it's gonna be too hard, I'm just gonna continue doing it my way. But no, we really have to do it. I mean you really have to constantly reinforce, reinforce, reinforce; because, if you don't, nobody's gonna do it.

Barb perceived that change could be easy or difficult. According to Barb, the key behavioral belief that made change easy was that nurses could affect the outcome so that it was better for those involved. Barb perceived that, when nurses held negative behavioral beliefs (takes too much effort to change, do not see the benefit) toward the change, change was difficult. Interestingly, even though change was perceived to be "constant," this unit as a whole did not "embrace" change as the MJH ICU nurses did:

Kim: What makes change easy here?

Barb: I mean change is never easy. I think change is easier here; because, like I said before, they're going to try it and, if it's not working, you can have a say in that. So, it's easier - it's just never easy. But I think you're heard. We do try things. ... And you have an opinion; and, well, yes, they listen to you. ...

Kim: What makes change difficult?

Barb: Set in their ways. It's not easy to change and start and have to learn it or do it a different way. They don't always understand why we're changing. Tired of constant change; we change a lot of things. ... I roll with it, but other people don't roll with it. So, it's overwhelming. Our Unit Manager will go to her APC meeting, her big manager meeting, and then come back with 20 things they want to try and do.

Pricilla perceived that change was easy for the unit and that the key behavioral belief was the nurses' ability to influence the outcome and make it better. This facilitated their ability to change:

Pricilla: No one likes to see change; they're like, oh, another form. But they accept it pretty well. They're pretty good.

Kim: Why do you think that is?

Pricilla: I think it will always be management, how management approaches it. I think if you involved more people and get their input, instead of just say this is what's happening, this is what you're doing.

Similarly, Paige perceived that change was easy when nurses believed that they could influence the outcome of the change and that the change was beneficial to them. Both of these were behavioral beliefs. These behavioral beliefs were apparent in Paige's example of how nurses were able to change the dress code:

Oh, if it is good [change], and it is something that we've been bitching about for such a long time, and she [Unit Manager] finally goes ahead and says okay. ... When I first started working there, during my interview, she [Unit Manager] said we could only wear - every unit had a different - three colors. We could have teal, seal blue, and white. That's our three colors. Other units have different colors. But that would set our unit apart. So, my God, we hated that - we complained so much about it that the hospital decided that anyone could wear anything that they wanted. Ah, we were happy.

The majority of nurses from the MH MS unit talked about two recent evidence-based changes in practice. One of the changes occurred when the hospital decided to implement Patient Comfort Rounds to help reduce the incidence of falls. Patient Comfort

Rounds were considered an evidence-based intervention that have demonstrated increased patient satisfaction and reductions in the number of times patients used the call light and a decrease in the unit fall rate (Halm, 2009 and Murphy, Labonte, and Houser, 2008). Patient Comfort Rounds required the nurse or nurse tech to perform purposeful rounds every hour. When they rounded, they asked the patient certain questions, met the stated patient/family needs, and documented that rounds were completed. The other change occurred in how chemotherapy was handled. Overall, the nurses had positive behavioral beliefs toward these changes because they perceived that the outcomes of these changes were beneficial for patient/families and/or themselves.

The majority of nurses interviewed from the MH MS unit held two behavioral beliefs toward Patient Comfort Rounds. First, they believed that Patient Comfort Rounds improved care outcomes. Second, they believed that enacting this change was not detrimental for them; instead, there was a desire on the nurses' part to improve patient/family care. For example, Cathy shared that Patient Comfort Rounds helped ensure that patient/family needs were addressed (positive behavioral belief). Also, Cathy perceived that frequent rounds were something she just did (positive behavioral belief), "But it's every day. ... It's just something that we do. Whenever you're in the room, you've got to make sure that everything is addressed." Mona shared that the Patient Care Leader (PCL) on her unit "did research" and, based on her findings, Patient Comfort Rounds were implemented. Mona also perceived that these rounds improved patient satisfaction. For Mona, like Cathy, Patient Comfort Rounds were not perceived to be a burden but rather a means to improve patient care:

Because we want to improve it. ... That's new. Actually, our PCL did research while she was doing her Master's; and we actually implemented it in our hospital. ... Now the patients are more happy, happier and no call lights. They did a study like that, and oh yeah it helped a lot.

When asked about Patient Comfort Rounds, Pricilla perceived that she had no problem enacting them. Pricilla believed that enacting this change was not a burden because it was what she would normally do: “Oh, you do that anyway, really. No, I don’t mind that. I know I’m in there all the time, between me and the techs it seems.”

The other change that nurses from the MH MS unit talked about was in regards to how they handled chemotherapy. Nurses from this unit obtained their chemotherapy certification by attending a course at a local cancer hospital. During this course, MH nurses noted a discrepancy in the way they handled chemotherapy. In a grassroots effort, they enlisted the help of their Patient Care Leader (PCL) or educator (sources varied on who it was) to retrieve research on how to handle chemotherapy. They presented this information with recommended changes to their Nurse Manager. Consequently, chemotherapy handling was changed based on the research. The unit level factors that supported this change are described in Chapter Five. From an individual perspective, Cathy expressed a positive behavioral belief toward changing the way chemotherapy was handled. This was evident in her perception that this change would be beneficial to everyone who handled chemotherapy:

And then they changed how they bring the chemo up. They have a chemo bag the pharmacy sends up, and we used to have two people check it. You’d have to sign on the bag, on the label; and we’re like, why are we doing this? We’re exposing ourselves to chemo; because you’re not gloved, you’re using your pen, why do we have to sign it? So, they implemented something else where you sign a sheet that’s on the chart. Two people sign the MAR and the order, instead of signing the chemo bag. Because it’s like you don’t know if you’re getting some or not, but why risk it? ... And, when I went for my certification in it [chemotherapy] at Blank, they explained how you have to have gloves that are up to here and they have special gowns for it. And we never had any of that. ... They kept looking like at evidence-based. Our Nurse Educator was printing some information, so they’re trying to get stuff improved for us. ... Our floor, they just ordered new gowns with the tight cuff and then the special gloves.

Similarly, Paige expressed a positive behavioral belief toward the changes made in how chemotherapy was handled: “Things have changed, based on some research that our Educator has done that we weren’t handling chemo properly. Our educator got the

evidence, and we changed our gloves and the bag.” Likewise, Barb perceived that changing the way chemotherapy was handled, made it safer for all involved. This reflects a positive behavioral belief towards this change:

Our PCL went to all the journals and all the research information she could find, and pulled up everything. ... New gloves were ordered for us to try. Gowns were ordered for us – masks, additional masks. We’ve always had it here but we didn’t have chemo gloves. We double-gloved regular gloves, which was not against the standard, but not what they thought was the best practice. ... We are hoping for some written changes - a stricter policy.

Nurses in the MH ICU did not speak of a single change or improvement; rather, they unanimously shared a perception that overall they “embraced” change, because it was a “constant” state. Nurses from this unit, for the most part, believed that changes in practice were beneficial and were made to improve patient care. For instance, Claire perceived that change was “embraced.” She believed this was based on people’s “attitudes” and their attitudes could make it easy or hard: “I think it’s embraced. ... Change itself is hard. People. Well, I think everyone brings in their own attitudes and their own biases.” Similarly, Yolanda perceived that change is “constant” and implemented to improve outcomes: “It’s a constant. They’re constantly doing something to improve. ... They’re constantly posting notes, so we can read about those and try to improve.” Also, Betty perceived that change is constant on the unit. These changes may or may not be based on evidence; but, overall, nurses embraced the changes. Betty perceived that many changes were made to patient care that incorporated the latest evidence and technology. These constant changes to patient care were perceived as improvements. This reflected positive behavioral beliefs towards changes:

Oh my God, of course I think in our unit we adapt amazingly well to change. I mean every - it seems like constantly. Our Unit Manager put out something, I think last year at Christmas, and she listed all the stuff that our unit had gone through - different things that we were learning. And we had construction and oh my gosh; and it was like God, we do an awful lot adjusting. I think we do well. ... So I think that’s why we adapt well, because we kind of embrace it.... I like to go hear speakers, and they’ll say how many of you are doing the glucose stabilizer? How many of you doing the tight insulin control? Oh, I can’t even think

of half the things they - aquapheresis, continuous renal placement therapy, some of those things. ...And I'm like this [raises her hand], and they're like where do you work? So I know we are adapting quickly to a lot of new technology....

Summary of behavioral beliefs towards change/improvement. The majority of nurses from the MH expressed positive behavioral beliefs towards change. Consistent with the conceptual definition of behavioral beliefs, these beliefs were associated with comments, which suggested that the nurses perceived that the outcome of the change benefited the patient/family, their environment, and/or themselves. Also, change was perceived as a means to improve patient care and/or their work environment. Some nurses from the MH MS unit perceived that change was constant but that they did not “embrace” change as the nurses from the MH ICU did. Also, there was some undercurrent in the MH MS unit where some nurses held negative behavioral beliefs towards change; and, when this was present, change was perceived to be difficult. Interestingly, nurses from the MH ICU did not mention what enacting the change might cost them. Rather, they adopted the behavior because it was good for the patient. The behavioral beliefs expressed by nurses from both units might be associated with unit characteristics that hindered or facilitated their ability to create change. This will be discussed in detail in Chapter Five.

Behavioral beliefs towards informing and involving the patient/family. A key dimension of EBP, as defined in this study, is the inclusion of patient/family values and preferences in care decisions. In order to incorporate patient/family preferences, the nurse must inform the patient/family of various evidence-based care options. Once the evidence-based options are presented, the nurse supports and solicits preferences from the patient/family and incorporates their choice into the plan of care, thereby involving them in care decisions if they so choose. Given the essential role that informing and involving the patient/family in care decisions plays in EBP, nurses' behavioral beliefs towards informing and involving patient/families were important to assess. According to

the framework of this study, behavioral beliefs influence behavior and the theory posits that positive behavioral beliefs towards the object translates into an increased likelihood that the person will engage in the behavior. Therefore, nurses' behavioral beliefs towards informing and involving patient/families in care decisions are important in their individual ability to engage in EBP. Nurses that have a difficult time informing and involving patient/families will have a difficult time engaging in EBP as it is defined in this study.

No nurse in this study perceived that EBP included the dimension of incorporating patient/family preferences and values into care decisions. As a result, the concept of patient/family participation in care decisions was explored directly with participants. Nurses were asked how they came to understand what the patient/family wanted to have done and how they incorporated this into their care. From these discussions with the nurses who participated in this study, two dimensions of patient/family participation emerged. One dimension was nurses' perceptions of how physicians informed and involved the patient/family and this will be presented in Chapter Five. The other dimension was nurses' perceptions of how they informed and involved the patient/family. The quality of these communications and relationships influenced the patient/family's ability to be involved in the decisions that were made about the patient's care. Nurses involved in this study held various beliefs about informing and involving the patient/family. These beliefs related to: (a) informing the patient/family, (b) incorporating patient/family preferences regarding chronic care, (c) involving patient/family in shared decision-making, and (d) involving other caregivers.

Behavioral beliefs towards informing the patient/family. The majority of nurses from the MJH MS unit perceived that they educated, explained, or informed patient/families regarding their diseases, medications, and treatment plans. It is unknown if the information which nurses presented to patient/families was evidence-

based. Nurses also perceived that, by informing the patient/family, they were involving them in their own care. The informant role for the nurse was perceived to be beneficial for the patient/family because it filled in knowledge gaps and helped them adhere to the predetermined plan of care. This reflected a positive behavioral belief toward informing the patient/family. For example, Jennifer perceived that she filled in knowledge gaps that the patient/family had regarding what had occurred and what would happen next. Filling in these knowledge gaps reflected the behavioral belief that informing the patient/family was beneficial because they will know what to expect and/or how to care for themselves at home:

I think we spend, about, at least a third of the time talking to families, just talking to families and explaining things and trying to convince them, or responding to their complaints.... .. Explain things - why and what happened and what are the results and how do we interpret them and what is going to happen next. Then, especially families that stay there every day or plan to take the patient home, so we start teaching them pretty simple things - turn them, sit them up for meals. It depends, Insulin administration, [unintelligible word] care sometimes, or stuff like that.

Likewise, Michelle perceived that an important part of her role was to educate patient/families on “how it is going to be.” Michelle also stressed that the patient/family needed to be “on the same page” as care providers. Michelle did this by informing the patient/family of the plan of care that had already been determined. She did not mention that she involved the patient/family in shared decision-making. Michelle believed that informing and educating the patient/family was beneficial because they would know what to expect and how to care for themselves:

I like to see what they know by asking them and making sure that they're cared for from that point on [and that they know] how it's going to be. And, if they are not the one caring for themselves, then we need to get whoever is caring for them in here so we can all have this discussion and all be on the same page of what is going to happen. I try to make sure that they understand by putting it in their own words; medical terms are hard.

Similarly, Silvia perceived that she educated patient/families about medications, tests, and procedures that had already been prescribed. There was no mention that the

patient/family had been involved in making these decisions. Silvia perceived that informing and educating the family was beneficial because then they would understand what was happening:

I do a lot of teaching when I go in to do anything. Particularly something, like Coumadin or a test. And this is what they are going to do, and this is why they are going to do it. ... I try to get them there; I try to make sure they are understanding at least the small part of it that I have to do with, even if I can't do the whole comprehensive thing.

The MJH ICU nurses also perceived that that informing the patient/family to fill in knowledge gaps was beneficial (behavioral belief). Nurses shared that they frequently educated, informed, and explained the predetermined plan of care. It is unknown if the information that was provided by the nurses to the patient/families was based on evidence. Similar to the MJH MS unit nurses, the majority of MJH ICU nurses perceived that when they informed the patient/family about their disease, medications, and treatment plan, they were involving them in their care. For example, Tom perceived that informing the patient/family about "everything that is going on" was beneficial for the patient/family (behavioral belief). However, there was a sense of one-sided communication in that Tom perceived that his over-communicating was an "effective tool" in establishing the plan of care. There was no mention that the patient/family was involved in decisions:

I'm very particular with talking. ... I almost talk too much. I try to describe everything that is going on, why we are doing this, very particular about setting the plan of care. I think that's probably a really good tool for me because I find so often that other nurses don't even describe certain things that patients get upset about certain stuff. "I don't know what's going on with this and I don't know why this is going on." ... I'm a big talker.... ... I actually will truly ask specific question of "is there absolutely anything you need?" Direct forward. ... But I think I'm pretty good about just straightforward asking, "Is there anything else you need? Is there anything else bothering you?" I always say, "Is there questions, comments, concerns, or gripes of any kind?" I say it to just about every single person.

Similarly, Bob perceived that helping the patient/family "understand" what was happening was a vital role he assumed. This portrayed a behavioral belief that informing

the patient/family had a positive influence. Nonetheless, Bob did not mention that the patient/family perspective was sought or that they were invited to participate in decision-making. Rather, Bob and/or the physician “talked to” the patient/family to let them know what to expect:

Bob: Just talking to them. ... I think that you can meet people and you can help them understand. That's, I think, what you are there for, to help that person, the family get through things, too. ... Just trying to help the family understand things, their needs, too; because we're there for the patient and their family. So, the family with their needs during the patient's stay there with us.

Kim: How do you do that?

Bob: I just explain things and try to arrange that they need to talk to the doctor, for the doctor to meet with them. ... I always try to get in with the family and the physician; and I'm always there, discussing things. And, I think then I can help them clarify things that are with the family.

Likewise, Jean perceived that informing the patient/family regarding “what was going on, what was done, what we were going to do, and what was going to happen” had positive consequences for the patient/family. She perceived that the patient/family's anxiety was reduced and their trust in the caregivers was increased. Similar to the previous examples, there was no mention of involving the patient/family in care decisions:

I think, the more I talk to them, the more I explain to them. ... I feel sometimes they don't trust because they don't know what is happening. ... I think explaining every little step and explaining what is going on, what was done, what we are going to do, and what is going to happen, and what is to be expected, and how it may affect them, and how it may not.... I think that takes the anxiety away and I think that is when they feel they are satisfied, for me, is by explaining. ... Then you come in and explain things little by little. And I think that takes their anxiety away; and they say, “Okay. Now I know what is happening.” To me, that is the main thing, not knowing what is happening or the family not knowing what's going on and then somebody explaining it to them.

Similar to the nurses from the MJH, the majority of nurses from the MH MS unit believed that the informant role of the nurse was beneficial to the patient/family. For example, Marcy perceived that informing the patient/family of what to expect when the patient received his or her chemotherapy was helpful. This reflected a positive behavioral belief toward informing the patient/family:

Just having that relationship, I think, with anybody - it doesn't have to be a chemotherapy patient - even though I really love them and I love teaching them new things, like if they're getting chemo for the first time. I love explaining it to them and telling them this is what you're gonna expect, don't be alarmed if this happens; because I would want someone to be there for me, saying here you go, I'm gonna give it to you straight, this is what's gonna happen.... I just love building that relationship with my patients, any of them, any of them that I can.

Likewise, Mona perceived that answering patient/family questions was helpful: "If you try to solve, even questions or whatever, if you try to help them with that, it makes them - it helps them a lot. It's not only with the patient but with the family as well." Similarly, Debbie perceived that, when patient/families understood how and why they were to use the incentive spirometer, they were more likely to engage in the behavior. Debbie believed that educating the patient/family had a favorable outcome:

Just basic things like an incentive spirometer. Everybody thinks you're supposed to blow into it. And, if you just set it there in front of them, nobody gets it. It doesn't do anything. Well if you sit there and teach them, and even more people may know how to use it but don't know why. And I found if you explain what it's actually doing, people are more inclined to use it. Oh, I don't want pneumonia. I don't want fluid to build up in my lungs and things like that. Okay. I will use that then.

Similar to the other nurses in this study, the majority of nurses from the MH ICU believed that explaining, educating, and/or informing patient/families regarding their disease(s), medication(s), and treatment plan was beneficial. This belief exemplified a positive behavioral belief toward informing patient/families. Also, some of the next few examples demonstrate how MH ICU nurses incorporate patient/family preferences after they have explained care options to the patient/family. For example, Yolanda believed that informing the patient/family was beneficial because it helped them understand what was occurring:

I get a very good connection with the family. How do I do that? It's just conversation. I include them and I'm always answering, explaining, making them understand; and, if you have any questions, let me know. If I don't know, I'll find out for you. ... You know families are easy. Families are hard. Communication helps me understand them. Oh, absolutely. Open to communication. Including them, letting them know what you're doing and why you're doing it, not just going

in there and saying, “You need to leave. I need to turn the patient.”... Just open lines of communication are just enormous with families.

Ethel shared a story where she informed the patient/family of “why” certain interventions were done. These reasons were based on evidence and included frequent turning to avoid pressure ulcers and elevating the head of the bed to prevent ventilator-associated pneumonia. Apparent in Ethel’s scenario was her belief that informing and involving the patient/family in shared decision-making were beneficial:

The patient will guide you. ... I always try to ask them, which way do you want to go? Which is more comfortable? On your right or your left? You need to turn; this is why. The one thing that I think we face the most is the head of the bed being 30 degrees. A lot of people don’t like that head up that high. They’re not used to doing that; nobody sleeps that way. So, we try to explain that...to them; and, if they absolutely refuse, fine, that’s your choice. But here is why we want to do it.

Likewise, Tony shared a scenario in which the family served as the decision-maker for the patient. Tony provided information about potential outcomes to the family and this helped them make a decision. Also evident in this example was the behavioral belief that patient/family involvement in care decisions improves the outcome:

Well, if that’s their decision, that’s their right and that’s what they want. Then, we present that to the physician as they come in. And say, “Hey, they want everything possibly done. We’ve discussed the quality of life, and they know they may be adversely affected and they may not come out of this the way they came into this.” If they want things done, that’s what they want to do.

Summary of behavioral beliefs towards informing patient/family. EBP integrates the best evidence, patient/family preferences, and provider expertise in making clinical decisions. In order to include patient/family preferences in care decisions, patient/families need to be informed of evidence-based care options. The majority of nurses in this study believed that informing patient/families was beneficial. However, it is not known if the information that nurses provided for the patient/family was evidence-based.

Behavioral beliefs towards incorporating patient/family preferences regarding chronic care. Some nurses from the MJH MS unit attempted to discover and

incorporate patient/family preferences regarding chronic conditions into their care, “if possible.” These nurses believed that finding out and incorporating patient/family preferences about their chronic condition had positive outcomes; however, this had its limits. Incorporating how patient/families did things at home involved the patient/family in care, but there was no mention that the patient/family was actively involved in making care decisions. For instance, Chris shared that he created an “atmosphere” in which patient/families felt free to voice their requests. Chris tried to accommodate patient/family requests but he would let them know if something was “inappropriate.” Also, Chris did not mention whether or not he involved the patient/family in decision-making regarding their current illness:

I think it is just a matter of letting them know that it is okay, indicating that, if you can, just be apologetic to the fact that you may not be able to accommodate some things. But, if a person wants to take one pill at a time, even if it is 15, that’s okay. I will know tomorrow that you will be my last patient, because everybody else is getting medicines late. It is a matter of me adjusting. So, I think it is just a matter of setting the atmosphere where it is okay to bring these things up and not making them feel bad in any way that they brought some up. And yet, if something is inappropriate, to at least be able to indicate that is simply not possible in a, shall we say, ah, a strong way without being bad to them.

Similarly, Cindy attempted to incorporate how patient/families dealt with chronic conditions at home into the hospital routine, “if possible.” Cindy believed that it was good for the patient/family to do things the way they did them at home, but only if it fit into the hospital routine. Cindy, like Chris, did not mention whether or not she engaged the patient/family in shared decision-making regarding their current illness:

Then, they can tell you, “Oh, when I was at home, we do this and at home we do that.” And I take a lot of feedback from my patient’s family because I might be only caring for your mom, your dad, your grandma for one day; but you’ve actually seen this going on for more than I have. So, what do you guys do at home that maybe, if possible, we can do here at the hospital?

Likewise, John incorporated how the patient/family did things at home because they knew the best way (behavioral belief). This approach involved the patient/family in their

care, but there was no mention that patient/families were involved in making care decisions as the illness episode unfolded:

I ask; because, I mean, especially if it's something that's chronic for them, who knows them better than they? What do they do at home? What works for you? And so I just ask. Was it treatments and blood draws, anything of that nature? I mean I'm sure you've had blood drawn before. I see nothing on your arm. Where do they get your blood? How do you do things at home? What type of treatments? How do you use oxygen? How do you do your nebs? Do you do it yourself? By just asking them, you also get an idea of what they know and don't know. And then you kind of know what you need to do for plan of care. You know how much teaching and stuff. So I ask and I talk.

Nurses from the MJH ICU did not mention that they incorporated patient/family preferences regarding their chronic condition in their care, except for Tracy. However, instead of incorporating how the patient/family did things at home, Tracy asked the patient when they wanted certain things completed. Tracy perceived there was a positive outcome when she let patients decide when certain things would be done:

I try to explain why we're doing something.... .. Even like things like baths. They don't feel like getting a bath because they're tired. They don't feel like moving around in the bed. Well, I'm gonna give you a bath this day - what time do you want me to do it. What time would be best? Do you think it'd be better before lunch, or after lunch, or before pain meds, or after pain meds? Or, just things like that. But I try to give them options. They'll say, you know, you read about autonomy and how it can actually help people out.

Nurses from neither MH units mentioned that they incorporated how patient/families did things at home. Instead, they engaged the patient/family in shared decision-making and perceived that the patient/family was their "center." Believing that the patient was their "center" and engaging them in shared decision-making will be covered in the next section.

Summary of behavioral beliefs towards incorporating patient/family preferences.

The behavioral belief that it was beneficial to incorporate how patient/families did things at home into the hospital routine was predominately present in the MJH MS unit. One nurse from the MJH ICU also mentioned that she allowed the patient to choose when certain aspects of care were completed. However, there were limits to what the nurses

would incorporate. Nurses from the MH did not speak of incorporating how patient/families did things at home; instead, they spoke of involving the patient/family in shared decision-making and that the patient/family was their “center.”

Behavioral beliefs towards involving patient/family in shared decision-making. The majority of nurses from the MJH MS unit did not mention that they engaged patient/families in shared decision-making, which is a defined dimension of EBP. This was apparent in the examples in the previous sections. For the majority of nurses interviewed from this unit, there were no behavioral beliefs towards involving the patient/family in shared decision-making, because they were not mindful of it. However, three nurses, out of the ten who participated, perceived that it was beneficial to engage the patient/family in shared decision-making. For instance, Francesca shared that, when the patient had a terminal illness, sometimes there were differences in what the family wanted and what the patient wanted. In order to resolve this situation, Francesca asked the patient what they wanted to have done when the family was not around. By doing this, Francesca incorporated the patient’s wishes into his or her care:

Lots of times, if I know somebody is really sick and they are terminal - and the family will push and push. And if the family and I can see the patient kind of like not saying anything; and, when the family is gone, I’ll talk to the patient. What are your wishes? Is this what you want? Just curious, what are your feelings, what do you want, and stuff like that. And, if they say to me, I don’t want to go through this anymore, I will talk to the family when they come back and say, they did mention to me that they’re tired. ... But I try to be my patient’s advocate, always; because sometimes family, they can push, push, push.

Similarly, Mary shared that she presented the patient/family with information so that they could make “their own decision.” Mary perceived that patients had “better outcomes” when they decided what they wanted to have done, rather than when we “did things to them”:

And...here is where you are at, here is what we want to do, how would you prefer going about it? That gets them in their own care, gets them to make their own decisions, have more control in their own care; and it is actually better for them mentally. Better outcomes, I think, are when people are provided with the

information to make their own decisions; they feel a part of it. They don't feel like we are doing things to them; we are doing things with them.

Also, Chris perceived that shared decision-making with the patient/family most commonly occurred when deciding what to do at the end of life. Chris believed that it was beneficial to involve the family in making these decisions so that the wishes of the patient were carried out. However, he also perceived that this was not beneficial for him, because it took up his time:

I think the thing that comes up most often is when it comes to the end of life and you have to make some decisions on what are we going to do and what are we not. We call it DNR. ... We know what it means. It doesn't mean do not treat, but some families don't know that. So, at least it is good from the standpoint that we have the order form that the doctor is going to sign. And so, if they are trying to work through this, I talk to them in terms of what your loved one has either said they want or what you think they would want. And do your best to do what they would want. Then, when you look at this piece of paper, which of these things would they not want us to be doing for them and helping them more or less from that standpoint. Unfortunately, that takes time. ... It's a whole new area for them to be in. If I can help and answer the questions...it is that type of process to help the family make a decision.

Similar to the nurses from the MJH MS unit, the majority of the nurses from the MJH ICU did not mention that they involved the patient/family in shared decision-making. This was evident in the examples in the previous sections. Like their MS unit counterparts, they were not mindful of this; consequently, there were no behavioral beliefs towards involving the patient/family in shared decision-making. Additionally, visiting hours in the ICU were restricted for the shift-change report, for one and a half hours twice daily, as well as for the duration of multidisciplinary rounds which took place Monday through Friday. Restricting access to care providers limited the families' ability to communicate and be involved in care decisions. Nonetheless, two nurses believed that it was beneficial to have patient/families involved in shared decision-making; however their role was to explain the outcome of certain decisions and to defer decision-making to the physician. For example, Tracy perceived that she explained the outcome

that certain decisions had for the patient/family but that decision-making was the physician's responsibility:

Hmm, well, they [patient/family] make decisions on the big things - they have to legally, with the informed consent and everything. ... Um, well, I guess, a lot of times families will make decisions for patients, even if the patient can hear it at all and understand it at all; they just might not want to sign the consent. So make sure that the patient - we talk about it with the patient. I mean it's obviously the doctor that's supposed to explain the risk and benefits and all that. ... Just explain the benefits and risks and what each will imply. And, get them to really understand it or verbalize that they can see the different ways it will turn out.

Nancy also perceived that it was beneficial to involve the patient-family in shared decision-making. According to Nancy, the way to do this was to explain the outcomes of certain decisions and convey what the patient/family wanted to the physician:

I definitely have gotten more assertive in talking to families about these [resuscitative measures]; because some people, they just don't understand what's in store. If their heart was to give out or if they stopped breathing - what do you want done. What is your expectation here? ... If they're available, families are there to talk to me because, even if the patient states these wishes, if they're incapacitated, then it is still up to the family. ... I guess it may be how aggressive - if they really want this done, this done, this done and you can - and if you happen to catch a doctor or someone maybe in charge of that area. To be their advocate again, their liaison, maybe - what they're thinking or [tell the physician], did you know that this is what they would like? Or, help with the communication; bring that to light with the doctor. ... This is what they want; how can I help that? Or is that unrealistic?

A majority of nurses in the MH MS unit believed that involving the patient/family in shared decision-making was beneficial. Additional support for this belief was the nascent theme that the "patient was their center." That is, everything they did revolved around what the patient/family preferred. This concept was more fully developed in the MH ICU and was not evident in the MJH. The concept of keeping the patient/family as their "center," demonstrated an expanded perspective of the role that patient/families had in their care. When patient/families were the "center," they became the drivers of their care and were more involved in care decisions. This belief that the patient/family was their "center" was also apparent in their perceptions of how they dealt with "difficult" patient/families. This is covered later in the chapter.

For example, Mona (MH MS unit nurse) believed that involving the patient/family in shared decision-making produced “better care”:

It’s just time to talk to them. ... If I have to give some medications, I talk to them as well. And I’ll try to do two things at the same time. If I have to give some IV medicine, so during that time I’ll get to talk to them. And, if they have families, I interact with them. And ask them what they actually want or what they are having that they don’t want. So, then I kind of go from there or something. ... What’s good about it is that you can provide better care.

More specifically, Mona perceived that families influenced care decisions when the patient was terminal and could no longer speak for him or herself. Mona made care decisions based on her assessment and the family’s input. Mona believed that involving the family in her care decisions yielded positive outcomes:

But, since the patient is not able to tell us, usually the family members around a patient can tell us, “I think she might need something.” Although we also have our assessment; but, them being there 24/7 and even with the patient before that, they can provide us more information on what to do with the patient, how to treat the patient. Every patient is an individual, although all of them get standard [medication name] every four hours, morphine, something every two hours. If the family requests, “Don’t give her morphine this time; I think she’s okay.” And I’ll look at the patient and, if she looks comfortable, I don’t necessarily have to give it - so I can wait. But, so that they do influence the decision.

Similar to Francesca in the MJH MS unit, Debbie would talk with the patient when the family was not present to find out what he or she wanted to have done. This reflected a belief that involving the patient/family in care decisions improved the outcome:

I’ll double check with the patient when family’s not there and say is this - are you really comfortable with this decision? Because I don’t want someone to feel influenced; because my husband’s there, or my wife is there. But I have to do it this way, because that’s what they want.

In particular, Debbie believed that involving the patient/family in deciding what they want was beneficial: “How much input they want. How much explanation they want. What they don’t want. And things like that. And that helps.” Additionally, Marcy believed that nurses had the patient/family as their “center” and that this was beneficial:

I think a lot of people that I work with are really good at keeping the patient as our center. There are some that are not, but you have that anywhere. But, for the

most part, I feel like, as oncology nurses and even med-surg nurses, we have to have the patient as our center - you have to; it's what you're here for.

Like their peers from the MH MS unit, the majority of nurses from the MH ICU believed that involving the patient/family in shared decision-making was beneficial. This group of nurses perceived that the patient/family was the "boss." Nurses perceived that their role was to inform the patient/family about care options and their potential outcomes. Then, the nurse would solicit patient/family input and incorporate their preferences into the plan of care. Additionally, the MH ICU, in contrast to the MJH ICU, had no restrictions on visiting and invited families to attend daily multidisciplinary rounds. This encouraged family members to be present and to participate in discussions regarding care decisions. For example, Tony believed that informing and involving the patient/family in care decisions was beneficial:

If they say, well, no matter what, we're going to do everything we possibly can, and they don't care what it takes or what we have to do, we're going to it. That's okay. Fine. Then this is what we are going to do, and this is what probably may happen. ... Well, that's their decision; that's their right; and that's what they want. ... If they want things done, that's what they want to do. ... Yeah, it's definitely their decision. What you want to do is what we do. And you're the boss. You're the bosses. Down, you know, bottom line. ... We give them information and help them understand, this is probably what's going to happen. It may not, but this is probably what's going to happen.

Likewise, Ethel believed that involving the patient/family in shared decision-making was beneficial: "I mean we always try to do what the family wants. I mean we really try to include that within the care. ... But we really take that to heart and listen to what they have to say." Betty had the opportunity to mentor a high school student who was interested in becoming a nurse. Betty shared with her that the "patient is your boss" and that, even if you do not agree with what the patient/family wants, you "need to honor their wishes":

I said the patient's your boss. And I think a nurse that wants to kind of put her views in there and kind of guilt them or control them - that's a really bad way; and, if this person says they want to live, they want everything possible done,

then we need to honor that, even though we know it's going to be futile. We still need to honor those wishes.

Summary of behavioral beliefs towards involving patient/family in shared decision-making. The majority of nurses from the MJH did not mention that they involved the patient/family in shared decision-making. Consequently, there was no behavioral belief toward this behavior. However, there were three nurses from the MJH MS unit and two nurses from the MJH ICU who did mention that they involved the patient/family in shared decision-making and that they believed that this was beneficial. In contrast, the majority of nurses from the MH perceived that they involved the patient/family in shared decision-making, and they believed that this was beneficial. In the MJH MS unit, the nascent theme that the patient was their "center" was present. This theme was more pronounced in the MH ICU, where the majority of nurses perceived that the patient/family was their "boss." Perceiving that the patient/family was their "center" or "boss" connoted that they were the drivers of their care and that they were involved in decision-making.

Behavioral beliefs towards involving other caregivers. Involving other caregivers in the care of the patient/family provides an opportunity for other care options to be presented to and considered by the patient/family. The majority of nurses from the MJH MS unit did not mention that they involved other caregivers when they provided care. Consequently, they had no behavioral beliefs towards this behavior. However, just like involving the patient/family in care decisions, two nurses believed that it was beneficial to involve other caregivers in the care of the patient/family because more of their needs could be met. For example, Francesca perceived that there were many resources available to her. She believed that involving other caregivers in the care of the patient/family was beneficial, because they provided other options to the patient/family. However, it was not known if these options were evidence-based:

We have lots of resources. We have a social worker, blank, who is awesome. And hospice; we see hospice - I see hospice all the time. I have a good relationship with them and stuff like that. ...And sometimes I try to see if maybe hospice might be a better care for them. Just palliative care, something that maybe the patient, and then I'll do a consult if they say, yeah, we'd like to hear about it. I'll do a hospice consult, and they'll come in because they know more and they'll know how to talk about it.

Similarly, Mary perceived that she found out what the patient/family wanted or did not want to have done. Once this was determined, she decided which issues she would address and which issues she would let other caregivers address. Mary believed that involving other caregivers was beneficial, because more of the patient/family's needs would be addressed:

I am speaking with them and they're telling me they want these things done. ... They are dissatisfied with this and that, this issue, not this issue. ... I kind of, I guess, my process in my head is, okay, are some of these legitimate? What is the most important? What are my priorities? And I line that up in my head of what do we need to address first. Can we address some of these things, and do I need to pass these things on? Who can give them the most satisfaction? In other words, who could solve their issues, because it's not usually all on me. I just have to channel their stuff to the different departments and doctors. Do they need a new consult? Are they unhappy with their doctor? Is it a pain issue? Is it a medication issue? I guess what I am saying is I prioritize and then channel stuff out as much as I can, delegate to others. Delegate it out and get as much done as possible.

The majority of nurses from the MJH ICU mentioned that other caregivers were involved in the patient/family's care during multidisciplinary rounds. Outside of rounds, nurses did not mention that other caregivers were involved in patient care. Interestingly, nurses primarily believed that rounds were beneficial for themselves. Few nurses perceived that rounds were beneficial for the patient/family. In light of the curious nature of this finding, it will be included here in efforts to further delineate the differences between the units. For example, Tom perceived that rounds were good because he learned things about the patient's disease and treatment and he learned about the other patients in the unit:

We usually have interdisciplinary rounds. ... Sometimes rounds are educational. ... But part of it is to inform the other nurses on the unit of what's going on. ...

Now, the way rounds are good are for education purposes, which I definitely enjoy. If you have a very complicated case and there is a very educational-directed doctor who will really tell a lot about it. ... So, that's very helpful.

Similarly, Fred believed that rounds were good when he could voice his opinion and "impact" care. When Fred "impacted" care, he believed this was good for the patient because he brought up something that was overlooked. Fred also believed that rounds were good when he learned something:

Fred: We have people from all disciplines there. ... As a nurse, it gives you a lot of autonomy because it allows you to verbalize your opinion on what can we do to improve care, what can be added, what can be taken away. ... So, it gives you opportunity to really impact patient care.

Kim: How do you impact patient care?

Fred: Well, picking up on things that maybe got overlooked by some other discipline. Maybe they are on an antibiotic that maybe is more resistant to whatever bacteria they have, and the doctor hasn't had the chance to see the results. ... Oh, okay that is good. Or, you know, they have not tolerated fluid too well. They are kind of getting some edema. Cut back on their IV fluid rate. Just little things like that. ... I also like that the Intensivists will take time out during rounds to teach you about, maybe, the disease process or test results - you know, things to look for - why they ordered certain things. And take it to the next level.

Likewise, Dawn believed that rounds were beneficial for a number of reasons. Her beliefs about the benefits of rounds primarily revolved around how they benefited her. For example, she believed that rounds provided her with a plan for the day, addressed concerns she had about the patient/family, and she learned something about the patient's disease or treatment:

It's supposed to be all the different areas. ... We discuss every patient. ... And, basically, give like a goal for the day or a plan for the day of what we plan on doing as far as procedures. Addressing any issues we might have, like with pharmaceuticals, medications. And our plan - anything we need for the doctor at that point to address, too. And they can ask us questions. It's a good teaching opportunity, too - to teach about different disease processes. And they're [Intensivists] good about teaching us in that amount of time. And that's good too, because then we all know the patients in the unit. If something happens while someone else is gone, we know that patient, at least a little bit of what's going on with them. So it's helpful in that respect, too.

The majority of nurses from the MH MS unit involved other caregivers in the care of the patient/family and they believed this was beneficial. As previously mentioned, the nurses from the MJH MS unit involved other caregivers to help meet the needs of the patient/family. However, nurses from the MH MS unit involved other caregivers not only to meet the needs of the patient/family but also to facilitate shared decision-making. The other caregivers provided options and perspectives to the patient/family and helped support them during the decision-making process and beyond. It is unknown if the options they provided were evidence-based or not. For example, Cathy involved other caregivers to provide options to the patient/family and to support them during and after the decision-making process. Cathy believed that this was beneficial for the patient/family:

They'll tell you a concern; and, "Oh, you need a Social Worker." We have CAPS. It's a cancer support service. ... It's two people that come around, former cancer patients; and they give them resources. So they'll talk to them, offer them additional support. They actually...help them cope better. ... And they're actually pretty good and they help follow them - and if they need anything. ... Sometimes, I guess, the coping with death, or a lot of patients can be, or their family members are in denial. ... Sometimes it's just trying to get somebody to understand something that they're just angry or in denial about. ... That's when I use my resources, like CAP - or if they have palliative care doctors. He's really good at talking to them. If they're willing, you can always send a Chaplain up to talk to them. Sometimes I think it's just the talking, most of the times that can help them understand.

Likewise, Barb involved other caregivers, such as the Patient Care Leaders who were assigned to the unit, in the patient/family's care. Barb perceived that the Patient Care Leaders were able to spend time with the patient/family, explaining their evidence-based options. Barb believed that this was beneficial to the patient/family:

Um, resources. I mean we have papers on everything. We have available reference information in our computers, policies and procedures, clinical standards. Um, evidence-based stuff we have. I mean that makes it easier; you have an answer and you're confident in the answer you give. But the Patient Care Leaders make it easier for us. That program has really helped, because I don't have time to sit and take care of those things. And they're more educated and they...have the time to sit down and explain more of that than we do, and that really helps a lot.

Similarly, Mona believed that involving other caregivers was beneficial for the patient/family. She perceived that these caregivers provided information and support during the decision-making process. It is unknown if the information provided by these other providers was based on evidence:

We have the social workers. They are all very nice; and, if you have any issues in that aspect, you can ask them. We have, from hospice - the hospice office is right there, because we get a lot of patients from hospice. They are great - patients that are end stage with family. If there are questions that they [sic we] cannot answer, they go to hospice.... Oh, they'll go into the room and just answer all their questions. And that's it; they can help you with everything. So, it's a good help for us. We also have CAPS...like, if you see that the patient gets overwhelmed, especially if they have a lot of problems, we just consult CAPS; and they talk to them for whatever pretty much what they need - what they need, and they can talk to them and find a way that, if you need something, like spiritual consult, they'll work on it. So, we always have them on our floor.

The majority of nurses from the MH ICU believed that involving other caregivers in the patient/family's care was beneficial. The other providers helped to meet the needs of the patient/family. Additionally, they played a vital role in offering care options and support to the patient/families before, during, and after the decision-making process. It is unknown if these care options were based on evidence. Involving other caregivers facilitated patient/family involvement in care decisions. For example, Claire perceived that various caregivers helped her meet the needs of the patient/family:

Resources, such as your social worker, case manager – they help us provide care. ... They also have palliative care, which is something that I was not used to having previously; and I think that's an excellent resource. I've not used the Ethics Committee. I know that they do have an ethics consultant.

Likewise, Tony perceived that daily multidisciplinary rounds facilitated interaction with other caregivers and adherence to evidence-based standards. Also, Tony conveyed the patient/family preferences to the care team. He believed that this benefited the patient/family:

And there's rounds in the morning.... Kind of go over the goal for the day and any needs that need to be expressed - which ancillary groups need to stop by and see the family members or the patient that day. ... I discuss what I have talked

about with the family members or the patient, or things that I've seen in the laboratory result. And make sure that's brought back to the attention of the physician. ... I think rounds are helpful. ... If they're on a ventilator, do a ventilator bundle. ... I'll bet it's helpful to everybody there. I mean, the dietician's right there and, instead of waiting for rounds - and - oh yeah, we got to recall the dietician to come back to decide what our goal is for today for the tube feedings; she is right there and involved. ... And the pharmacist is there also - he's great - for any medication adherence.

Similarly, Ethel shared that she involved palliative care when appropriate. The palliative care team spent time with the patient/family and provided information and care options. Ethel believed that this was beneficial to the patient/family and that it helped them make care decisions:

We have a wonderful palliative care team. We have a lot of death and dying in the unit. So, we have a wonderful palliative care team that'll come and spend time with them and help to give them any information of different options that would help them. ... We're trying to call them in a little sooner, within a week of the initial admission. If we see patients that are repeats, you know, frequent flyers in the hospital, we try to get palliative care to come back and see how they can better facilitate managing this patient and them not coming back to the hospital all the time. ... We also use them for cancer patients, pain patients.

Summary of behavioral beliefs towards involving other caregivers. The majority of nurses from the MJH MS unit did not readily mention that they involved other caregivers. A couple of MJH MS nurses did speak about involving other caregivers and they believed that this was beneficial. Nurses from the MJH ICU mentioned that they involved other caregivers during multidisciplinary rounds. Interestingly, the majority of nurses believed that rounds were beneficial to them, while only a few expressed that rounds were beneficial to the patient/family. In contrast, the nurses from both MH units believed that involving other professional caregivers was beneficial to the patient/family, such that other providers helped meet the patient/family needs and facilitated shared decision-making.

Control Beliefs

Control beliefs, according to the theory of planned behavior, are beliefs about the presence or absence of factors, which impede or facilitate the person in performing the

behavior. These beliefs may be based on past experience with the behavior or by other factors, which improve or diminish the perceived difficulty of performing the behavior. Control beliefs relate to the perception that the person has or does not have the capacity to carry out the behavior. The theory of planned behavior posits that people who perceive they have more resources and opportunities and fewer obstacles are more likely to engage in the behavior.

EBP is a decision-making process, which integrates the best evidence, patient/family preferences, and the expertise of the provider. To do this, nurses need to ask clinical questions and seek out evidence to answer these questions. Next, nurses share these evidence-based care options with the patient/family and seek their input. Then, the nurse uses their expertise to integrate the evidence with the patient/family preferences to make a decision.

In this study, a majority of nurses shared that they did not question their practice and they did not seek out evidence or research when making clinical decisions. Instead, they relied on their own experience or asked their peers for information. Relying on experience and peers for information might or might not facilitate the use of evidence in practice. They also relied on embedded evidence in the form of orders, protocols, policies, procedures, and standards of care to inform their clinical decisions. Following embedded evidence did facilitate their use of evidence, but the nurse was not asking clinical questions or seeking evidence to deal with issues that arose during the illness episode.

Overall, nurses in this study held four control beliefs that helped or hindered their ability to engage in EBP. These factors included the following perceptions: (a) experience guided practice, (b) evidence was embedded, (c) amount of resources and supplies (staffing and supplies/equipment), and (d) computer as a source of information. These beliefs influenced the nurses' ability to engage in EBP and will now be presented.

Control beliefs concerning experience guided practice. EBP, as defined in this study, is a decision-making process, which incorporates the best evidence, patient/family preferences, and individual expertise. Clinical expertise is defined as the experiential knowledge and judgment gained as one practices in a discipline over time; in other words, it is their experience. Clinical expertise is central to EBP for it allows the integration of evidence with the patient/families' preferences when making a clinical decision. The majority of nurses in this study perceived that their experience helped them decide what to do for a patient. Also, when nurses encountered situations in which they did not know what to do, they asked someone else who had "experience with it" to provide them with guidance and information. The nurses from whom they sought information were not asked because they had expert knowledge, but because of exposure to the situation. Of course, certain nurses could have the latest up-to-date evidence or expert knowledge, so this control belief of relying on peers as a source of information could facilitate or hinder the use of evidence in practice and depends on the peer's knowledge base.

When asked how they decided what to do for the patient/family, the majority of nurses from the MJH MS unit perceived that experience guided their practice. For instance, Mary perceived that deciding what to do was "complex." Mary relied on her "years of experience" rather than evidence when making clinical decisions. She did not give her decisions a second thought; they were "automatic." Mary's belief that her experience provided answers might prevent her from thinking about how to do things differently:

It's very complex but you just do it automatically.... You don't even think about them. You don't even really break them down, and it comes from years of experience at doing the same thing over and over again. That is how that happens. ... Because I think your mind is already, you know, after you've done something so many times you just have, you are, I don't know, you have trained thinking or something like that. It is like you already know how to channel these things. Your mind goes on automatic, and it just does.

Likewise, Cindy perceived that she made decisions based on her experience rather than looking to the evidence, “probably just past experience. ... Most of what I told them was based on my past experience.” Similarly, Michelle made clinical decisions based on her “experience” rather than evidence:

I just know from experience and what I’ve learned. ... Experience, I would say, books, a little bit, you learn, you can only learn so much. But, really, experience is the best way, I think, to know what to do.

In addition to relying on their own experience, the majority of nurses from the MJH MS unit primarily turned to a peer for information when they encountered something they did not know. The key characteristic of the person whom they went to for information was that he or she had experience regarding what they were seeking information about. The control belief of relying on peers as a source of information might or might not facilitate their use of evidence in practice, depending on the knowledge base of the person whom they ask. For example, when asked what she did when she came across a situation with which she was unfamiliar, Mary perceived that she sought information from her peers. The primary reason for selecting one nurse over another was experience:

Mary: Oh, I’d definitely go right to somebody else. Whoever has experience on the floor. ... I’d go to another nurse; she doesn’t know, I go to another nurse; and, if nobody knew on the floor, I will call my Team Leader; I’ll call the Nurse Manager. ...

Kim: The nurse that you go to for information - what are their characteristics?

Mary: I guess my way of thinking would be somebody with a lot of experience. If Jennifer is on the floor, she has a lot of experience. She is a levelheaded nurse, so I would go to her and ask her. I would go to Sharon - she is an older nurse, too, and she has a lot of experience. So, believe it or not, I would go to those two before I would go to my team leaders.

Kim: Is that because of their experience?

Mary: Uh huh, yeah, yeah.

Similarly, Grace would go to a peer if she came across something she did not know. Like Mary, the nurse she would go to would “have been a nurse for a long time.” This demonstrated the belief that knowledge gained by experience surpasses expert knowledge or evidence and might prevent the use of evidence in practice:

Grace: I would go to somebody.

Kim: Go to a peer?

Grace: Absolutely.

Kim: How would you decide which peer to go to?

Grace: Well, if I know they have been a nurse for a long time.

Also, when she did not know how to do something, Lucy shared that she asked the Team Leader or a peer for information. This behavior facilitated the use of experience instead of evidence to guide practice. However, depending on the peer’s knowledge base, this belief could facilitate or hinder the use of evidence. When asked if she goes to a peer for information, Lucy said, “Absolutely, I go to my Team Leader if I see something I don’t know, or I’ll ask a nurse, ‘Have you done this?’ Absolutely.” Similarly, when John encountered a clinical situation in which he did not know what to do, he shared that he asked a peer for information. John looked for a person who had “encountered” the problem he was looking for an answer to. Like the others, asking a peer what to do in a clinical situation facilitated the use of experience rather than evidence in practice:

John: I ask.

Kim: Whom do you ask?

John: Anyone. I think anyone, because someone might have less years of experience doesn't mean they haven't encountered that problem within that. So, it's one of those things that I have no problem asking. My peers would be the first one. Well, if they don't know, I go to ICU. ... But, if for some reason they don't know, well then, I'll call the boss who has a lot of experience in critical care as well.

John was presented with a scenario where a patient did not cleanse his or her skin with alcohol prior to self-administering his or her insulin. John was asked where he would look for information to find out if their technique was okay. John shared that he would first ask his peers if this practice was acceptable. Only if his peers did not know the answer to this question would John then look to evidence-based information. John's belief that his peers and their experience were his primary source of information delayed his looking to evidence for the answer to his clinical question:

Kim: When you have a clinical question, like a patient says, "I don't use alcohol on my skin before I give myself insulin." And you believe the opposite that she should be using an alcohol wipe before she injects herself because we do. How would you find out which one's right? ...

John: I can ask.

Kim: Whom would you ask?

John: Peers. Say, hey, do you know of anyone that just does this? Or look it up. ... So, I would ask and just kind of, if nobody knew the answer, kind of look into it. Go to either online or I have all my nursing books. So, I would take out one of the Perry and Potter.

The majority of nurses from the MJH ICU also perceived that when they made clinical decisions, their experience guided their practice. In addition to experience, a majority of nurses perceived that orders and protocols helped them make clinical decisions. This belief will be presented below under embedded evidence. An example of nurses relying on their experience can be found in Nancy's perception that she had a "system" that she knew worked for her. Consequently, she did not mention that she questioned what she did but rather she followed a routine based on her experience:

Nancy: I just have my system. I have a to-do system. And starting with my assessment and start with my actual patient as long as I get settled and then that I'm happy with where they're at and I move on to the family next as long as there's family there and I start communicating with them. ... Okay, just...seeing what you can do to help them, whether it's clean them, turning them, changing them, lines, medicines. What's due? What's not due? Looking up your results, lab results, and things about the person.

Kim: So it sounds like you rely on your past experience?

Nancy: Yeah, what I know works for me, definitely. Yeah.

Similarly, Tom relied on “pathways in his mind” when making clinical decisions. These “pathways” or his experience informed his decisions. Tom also perceived that protocols helped him decide what to do. The protocols were evidence-based so this facilitated Tom’s use of evidence. The use of protocols reflects another control belief that evidence was embedded and is presented below. When the patient’s status changed and the protocol and experience no longer fit the situation, Tom looked to the physician and his peers for suggestions rather than turning to the evidence:

I think I kind of have my different kinds of pathways already in my mind; and, if anything doesn’t go out, if something isn’t working, I call the Intensivist and give them that information. Let’s say I’ve started a presser and it’s not working and it’s usually on our protocol, we have boluses and then we start Levophed. If it’s not working, I can call the doctor and try to get another presser put on board. ... I would have to say that I have pathways in my mind. I usually follow those pathways; and, if it doesn’t work, I call a doctor - I get a hold of a peer.... Trying to think of something particular with that but I do it pretty much every day. I wish I had more for you on that one.

Ricki also relied on his experience when deciding what to do for a patient. He shared that he imparted patient information to the physicians and then followed their orders, which might or might not be evidence-based. Ricki perceived that he was too busy to incorporate formal knowledge or evidence into his care decisions. Rather he “reacted” or relied on his experience to guide his actions. Also, following physician’s orders either facilitated or hindered his ability to use evidence and was dependent upon if the orders were evidence-based or not:

Kim: So the information, then, comes from your past experience, it sounds like?

Ricki: Yeah. Oh, yeah, definitely. ... It’s like you receive information, process it. You help process it with infectious disease, because the white blood cell count’s high. But it doesn’t correlate to what’s going on here with some other aspect of the lab work. And then you will throw it at blood cultures and throw it at the doctor. Every piece of information needs to be directed to the big guns [physicians], as I call them. And they help process it, help us process it. I don’t know how much education I’ve gotten over the past several months from finding about grandfather clusters versus change versus this, that, and the other thing. I

don't remember now, but you know what? It stimulates the process later. But that helps take care of the patient. It's all dictated by the information we get, whether it be you look at the patient and they're breathing forty-four times a minute. Well, obviously something needs to be done. We don't just ignore it. Throw it at the Intensivist and go from there. ... A lot of times you're reacting. Unfortunately, you react. But, it's not like you can take that perspective of what we have been taught or read or enlightened upon.

Additionally, the majority of nurses from the MJH ICU sought information from their peers when they came across something they did not know. This too, exhibited their reliance on experience rather than evidence when making clinical decisions. The belief to first and foremost seek information from their peers was expected in this unit. For instance, Ricki shared that, when he came across something he did not know, he always asked a peer. Actually, Ricki perceived that nurses were "dangerous" if they did not ask for information. He shared an example where a nurse did not know what he or she was doing and did not ask for assistance until it was almost too late:

Oh, yeah. Go to a peer. I don't see anybody not doing that. Those are the most dangerous nurses who think that they can fly. ... Because whether they think that they know everything - and there's always somebody that does in the unit - or that they're just some sort of maverick or they don't want to ask for help, which is, of course, the worst kind of nurse. This particular instance, and I don't know the entire scenario, but I do know that somebody was working on something. They thought they were doing it right and then realized that it wasn't; whatever they were working on was incorrect. And it wasn't jeopardizing anything but it could potentially. [They] asked for help before it got out of hand, and everything was fixed before - so it's like you should ask before anyway. Yeah, before you even start to get into trouble. But, yeah, that's not a problem. We do, every one of us.

Similarly, Jean mainly sought information from the Team Leader (charge nurse) and the person that precepted her when she came to the unit. Jean shared that the information she sought was oftentimes about how to do something. Jean perceived that the Team Leader and her preceptor had "pretty good experience" and therefore were good information sources. The information she received from them might or might not be evidence-based. This reinforced the control belief that experience guided practice and that nurses did not readily turn to evidence-based information when they were uncertain about how to do something:

I usually ask somebody - that is my Team Leader because she is there most of the time. Or I will go to my, usually he is there, that I oriented with, the other nurse that oriented me. There are few people you can ask and say, "You know what? I am not sure about this. Can you come check it out with me, just, really quick?" and, "I think it is this way; but just double check me. I want to make sure it is done right." People I feel comfortable asking, first of all comfortable, and they have pretty good experience.

Likewise, Sarah perceived that, when she did not know something or how to do something, she sought out information from someone who had experience. Sarah shared that this was what all the nurses on the unit did. This supported the control belief that experience guided practice and nurses did not look to evidence-based information to answer their questions:

If it's something that we are not real familiar with, seek out somebody on the unit that knows it. That's basically what everyone kind of does. Yeah, go to each other - that's the big thing with us, not just doing something that you're not really sure of but finding somebody that does.

A majority of nurses from the MH MS unit also perceived that experience was important and that it guided their clinical decision-making. Moreover, the MJH MS unit nurses perceived that in addition to relying on their or other's experience, they also turned to embedded evidence to help them make decisions. Relying on experience can be found in Cathy's perception that she based her clinical decisions on experience, "I guess just things you learn. Just experience. ... If you experience continually doing things over and over, it just sticks in your head." Barb, too, perceived that, when she made clinical decisions, she typically relied on her experience and how she learned to manage her time from her preceptor. The control belief of relying on experience might hinder Barb's use of evidence because she did not question what she did but rather followed a routine she learned during orientation:

Experience, yeah, I mean, you did nursing school; you did your rounds. But I think it was the 12 weeks, or whatever we did, with the preceptor that kind of gave you your style and how you do things or you had your own, but you took that as reference. We were just talking about that this morning. So I think that's where I learned. In nursing school, you learned you have your - you look at your patients, then you get the little test on who's the most highly, you know - that you

have to get first, and so I think you learn that in school and then your preceptor helps you with that; and, I guess, yeah, the preceptor was how I learned that.

Likewise, Pricilla relied on her experience when she decided what to do for a patient.

Her experience provided her with a “repetitive routine.” This control belief might hinder her from questioning what she was doing and from looking for different ways to do things:

Pricilla: Sometimes it's just a repetitive, you just know what your routine is; but I may have to look and see what kind of patient you have. It's always easier the second day; the first day is kind of hard. ... I try; and, first of all, it depends what they're getting. If I know that, they need to, that their platelets have been running low before the hemoglobin, that's one of my first priorities. I usually try and quickly go and see everyone real quick. ... Then I try and really get that lab in and see what's going on with that lab, because that's going to set my pace on what I have to do.

Kim: It sounds like you rely on experience?

Pricilla: Oh my gosh, yes, experience every year, every year helps. You learn a little more.

The majority of nurses from the MH MS unit also asked peers for information when they were uncertain about or how to do something. For example, Mona shared that, when she came across something she was unfamiliar with, she asked a peer for information. Usually the person she asked had experience. This is consistent with the control belief that experience guided practice. However, when Mona could not find a nurse who knew the answer to her question, she sought out information from the physician or from “research.” The use of embedded evidence in practice in the MH became apparent in her thought process:

Now, if there's something that I've not encountered before, then I always ask somebody. Like if I had a patient that had this and now she has this, I just have to ask somebody. Most of the time, they've been there for a while so they can help me. If it's something new to them as well and I cannot find anybody, then sometimes you do research, or I'll just call the doctor and they'll let us know what to do. ... We have an Intranet. It's got all of the information, medication-wise, any new meds. Chemo, we do have, not only books but we also have the stuff online. So, yes we do. And now we have clinical standards or protocols; we pull them up from the computer as well. What we do is that we - if it's a protocol...we print it out and put it in front of the charts so everybody can see it. You're not the only

one that's probably not encountered it, so other nurses can see it and know what to do....

Likewise, when Barb encountered something she did not know how to do, she asked an experienced nurse. However, Barb shared that she saved reference material and would look up how to maintain certain equipment such as chest tubes when she had a question. Also, Barb shared that she retrieved evidence-based standards of care from the computer when she encountered a clinical situation she was unfamiliar with. Barb and Mona's information-seeking behavior was tied to their belief that everything they did was evidence-based. Searching for evidence or research might not have been their initial action when they did not know something, but it came in a close second:

I would ask a more seasoned nurse if there were somebody here. If it were something I couldn't figure out, usually I'd call ICU or CCU. ... And I'd say, "Hey, I've got this tube or I have no idea what this is; somebody tell me." The AOD [Administrator on Duty] would be my next choice. If all else fails, we go on the Internet and see if we can find a picture; or I have a whole drawer full of instruction sheets from chest tubes and things that, when they've been opened, I've saved. ... So, I reference stuff. Or you get online and you have a prisoner situation. You have things you don't deal with very often; and we'll go online, get the policy and procedure, and print it out. Then there are all our clinical standards that you follow. And you put it on the chart and you follow it.

Similarly, when encountering something she has not done before, Marcy shared that she would ask a peer who had more experience. However, the people, who Marcy chose to go to, especially the Patient Care Leaders (PCLs), had advanced degrees. There could be a tacit understanding that they were a source of expert knowledge. However, this cannot be confirmed with the data:

Oh, I'd ask somebody. ... Well, let's see, anybody who's been here longer than me or anybody who might have experience in that area. ... If there's a CN3, most CN3's have been here a while. Then I can tell them, "Hey, I don't know what this is. Can you tell me? I've never done this before." The PCL's have been very helpful too. They've been here for a while; they've seen a lot of things. They're obviously educated; I'd go to them, yeah.

The majority of nurses in the MH ICU also drew on their experience when making clinical decisions. For instance, Angela perceived that she relied on her experience to “put it all together quickly” to decide what she needed to do for the patient/family:

Angela: In those few minutes, you have to try to put all that together. And I don't know - it's something, I think, through the years you just kind of get - you just - I don't think you get used to doing it; but it becomes, I don't know - I don't know if the word is easy - but I could kind of sum it up really quick. Yeah, definitely past experience, yeah. I mean when you talk to someone you can tell if someone is anxious. ... I mean you're taught to assess the patient and see what needs are the most important; so, if I am dealing with a blood pressure issue, well the last thing I am going to be thinking about is putting lotion on a patient's back. I don't care about the patient's back. As a matter of fact, I probably don't care about fluffing your pillow; but I am going to care to make sure that I am maintaining my blood pressure, especially when your blood pressure is in the 60s, 70s. ...

Kim: And how do you know to do all that? Is it based on your past experience?

Angela: Yeah, yeah. Definitely past experience - you have to - that's the only way.

Similarly, Jill decided what to do for the patient/family based on how well the patient was doing and based on family input. Jill perceived that experience had a “big” influence on her clinical decisions:

Well, the first thing is the patient, obviously. They tell you what they need. Family is the next biggest thing, is what family says. ... And I think those are probably the two biggest. I think experience is a big one. What people have needed in the past and what's typical for that patient with that situation and that set of circumstances.

Likewise, Tony perceived that experience was “very important” when making clinical decisions. He perceived that his formal knowledge base was important in “getting his foot in the door.” However, he did not rely on this knowledge to make decisions but rather on his experience. Tony perceived that the knowledge he gained through experience was “critical knowledge”:

Oh yeah, I think past experience is very important. Yeah, school was good; it gets your foot in the door and you learn the ABCs and the - literally, you did learn that and get your foot in the door. And then get your experience and get your critical knowledge.

The majority of nurses from the MH ICU also sought information from their peers when they did not know how to do something. They, like the other nurses, looked for someone who had experience with what they were seeking information on. Dependent upon the knowledge base of the person whom they ask, this behavior might or might not hinder the use of evidence in practice. For example, Tony shared that he readily asked a peer for information when he came across something he did not know how to do:

Oh, I'll ask for help immediately. If you don't know something you're supposed to be in charge of that's attached to a patient, you got to find out immediately. I'd usually go to one of my coworkers. If somebody - if it's part of a dialysis thing, then the dialysis unit is right at the end of the hallway; so, I grab one of them. One of my coworkers – and, if that doesn't help me, then go to the charge nurse.

Similarly, Claire shared that, if she came across something she did not know how to do, she would ask a peer. Claire perceived that asking when you did not know something was very important and expected in the ICU. This belief might hinder or facilitate the use of evidence, depending on the knowledge base of the person they ask:

I would ask a peer. ... I think it's so important. We have nurses that come in; and I say, "The only type of nurse that is dangerous is the nurse that thinks they know everything and won't ask." And that's honestly you just need to be humble and ask and you just can't know everything.

Likewise, Jill perceived that there were numerous "resources" available to her when she came across something she was unfamiliar with. Dependent upon the situation, Jill shared that she would ask her peers or other disciplines for information. There could be a tacit understanding that these "resources" had expert knowledge. However, this cannot be determined from the data. Also, Jill shared that she would look things up in books or online to obtain evidence-based documents. This reflected the shared belief in this unit that everything they did was based on evidence:

Oh, definitely, go to my resources, know what my resources are, who my resources are. If it's something medication-wise, we're fortunate enough to have a pharmacist on our unit Monday through Friday during the day. If we don't, they're always a phone call away. The physicians are usually readily - most of them are readily available. Go to them. Go to your resources, your books, your PYSIS. If it has to do with a procedure, we've got policies and procedures that

we can go to on the computer. My coworkers, my CN3's. Other people in the hospital that are - we've got procedures that we're not quite comfortable that another floor does it all the time, such as peritoneal dialysis – or, if we have an OB patient, we never had a problem getting them to come down and provide whatever specialized care that that patient needs. So, it's just a matter of knowing where your resources are.

Summary of experience guided practice. Clinical expertise, or experience, is central to EBP for it facilitates the integration of research-based evidence with the patient/families' preferences when making clinical decisions. However, most nurses in this study solely relied on their experience when making clinical decisions. They infrequently turned to evidence and most did not think about patient/family preferences. They were unable to engage in EBP as it was defined in this study due to their primary focus on experience.

Also, when nurses encountered situations they were unfamiliar with, they readily asked someone who had “experience with it” for information. Relying on other nurses as a source of information might or might not facilitate the use of evidence and depends upon the knowledge base of the nurse that they ask. Some nurses shared that they asked people who exhibited subject matter expertise, such as the pharmacist, dialysis nurse, or obstetrics nurse. There might be a tacit understanding that certain nurses or other resource people had expert knowledge, but this cannot be substantiated by the data. Also, nurses from the MJH ICU and both MH units tended to turn to embedded evidence-based documents to answer some of their questions.

Control beliefs concerning embedded evidence. The majority of nurses from all units perceived that evidence or research was embedded in standards, protocols, orders, policies, and procedures. Nurses from all of the units perceived that they used evidence when they followed the embedded evidence. The perception that evidence was easily accessible and usable was a control belief, which facilitated the use of evidence in practice. This control belief varied in strength across the units. On the one hand, nurses

from the MJH MS unit expressed some uncertainty regarding whether they used evidence, and some were unsure where to find evidence. At the other end of the spectrum, the nurses from the MH ICU were certain that everything they did was based on evidence, and evidence was found in all their documents and checklists. Nurses' perceptions of the control belief that evidence was readily available and embedded will now be presented.

The majority of nurses from the MJH MS unit perceived that evidence was embedded in standards, policies, procedures, and "core measures." This unit was unique in that some nurses expressed that they were uncertain if they used evidence in their practice, even though they shared that they followed standards of care and protocols, which were evidence-based. On the other hand, some nurses were certain they used evidence in their practice. Additionally, some nurses shared that they did not know where to find the evidence-based documents. For example, Jennifer was unsure if she used evidence in practice but thought that evidence could be found in the "core measures" that they followed. Jennifer followed the evidence that was present in the core measures so having evidence easily available facilitated its use. Following this evidence seemed to have become part of her routine or what she did there:

Jennifer: I would guess, you know, maybe I should know more about that. I think I hear it here and there. Like the core measures, I think. That I could maybe contact the, maybe the, heart failure core measures.

Kim: Tell me about that.

Jennifer: Well we want to make sure that patients, coming in with heart failure or are diagnosed with one on the present admission, that they are discharged with Beta Blockers, ACE inhibitors, properly educated, stuff like that. Diabetic, I guess too - proper education - stuff like that.

Similarly, Michelle thought standards of care were based on evidence, and she followed these by incorporating them in her routine. Michelle's belief that evidence was readily available in standards of care facilitated her use of evidence in practice. However,

Michelle had a divergent perception of EBP in that it was based on “what had worked in the past;” and the unit did not readily change its practices as long as the old ones were working. These beliefs do not match the definition of EBP and the vital role that changing practice has in adopting and maintaining EBP. This belief adds further support to the negative behavioral beliefs MJH MS unit nurses had toward change. Furthermore, this perception did not influence the control belief that evidence was accessible and useable because, according to the theory of planned behavior, beliefs can be inaccurate, biased, or irrational:

I think that we do what, I guess, standard of care and we do what has proven to be, I guess, the best or that has worked in the past. So, I feel like we do that on our floor, what’s worked in the past - I guess, don’t fix it if it’s not broken.

Additionally, Silvia was more certain that some aspects of care were based on evidence. Silvia believed that wound care guidelines were based on evidence and she followed them. This control belief facilitated the use of evidence in practice. However, Silvia also perceived that nurses and other providers did not mention that what they did was based on evidence:

I can say that probably wound care is one of the things that is evidence-based. That, if you turn them, you get the pressure off then a decub doesn’t happen. ... I never hear the term [EBP]. ... I would say probably that our wound care nurses, probably everything that they say is evidence-based - is the way I look at it. But they don’t walk around saying that either.

Silvia continued that she did not know where to find evidence-based documents in her unit. This belief that evidence-based documents were not readily available hindered her ability to use evidence in her practice, “I don’t know where to go to get it [evidence]. ... And, as far as anything else [other than wound care], I just use my own evidence-based; because I have it in there [points to her head].” Similarly, Francesca “guessed” that protocols were based on evidence and she followed these when she was aware of their existence. This control belief that evidence-based protocols were readily available facilitated the use of evidence in practice. However, Francesca perceived that the

protocols were not always easily retrievable and she was not “taught how to find them” during her orientation to the unit. This control belief that evidence-based protocols were not readily available hindered the use of evidence in practice:

I guess I don't know that it's [evidence] there. Yeah, I'm sure it's gotta be there somewhere. We have lots of stuff; but nobody's ever said to me, “Hey, well we've got the evidence.”... We actually have the wound care specialists, and...I'm sure it has to be evidence-based by what they do, the protocols for each thing. Oh, we have the whole thing; we have tons of protocols. We have all the different - like hypoglycemic we have, and I'm sure that it's evidence-based. So yeah, we have all of that; and what makes it common knowledge but we had it actually put up - posted. ... What makes it hard, I guess, is finding the information. ... It's not like somebody said to me, well this is here in case anything were to happen, you're in there all the time and you're reading everything everywhere. But, if somebody actually said, well here, on this - online, we have all these whatever, evidence-based things, if you need anything, to go in there see what the protocols are, which I'm sure we have it somewhere - I don't even know, except that's not good. They never trained me to look for that.

A majority of nurses from the MJH ICU perceived that evidence was readily available in the form of protocols, orders, standards of care, policies, and procedures. The control belief that evidence was embedded and available in documents that nurses used facilitated their use of evidence in practice. For instance, Bob perceived that protocols used in the ICU were based on evidence. Specifically, Bob followed the Ventilator-Associated Pneumonia Prevention Protocol (VAP); and this facilitated his ability to use evidence in practice:

I think the policies and procedures are based on evidence. I mean, the protocol that we have a ventilator protocol. That, whenever a patient comes up and whenever a standing order for ventilator protocol - that includes how to keep HOB at 30 degrees, like how to Peridox mouthwash - and then...VAP and print it off before and to [sic it is] proven to reduce the incidence of VAP. So, I haven't, I think that they do base it on evidence-based practice.

Similarly, Tracy perceived that most of the care that she provided was based on evidence. The evidence could be found in their orders, standards of care, and protocols. Believing that evidence was readily available in written documents facilitated the use of evidence in practice. However, Tracy shared that nurses did not always know why they

did certain evidence-based interventions and this lack of knowledge influenced their ability to change their practice; this will be explored in Chapter Five:

But I know that a lot of the reasons we do certain things are based on evidence-based practice. Like, raise the head of the bed for a ventilated patient; it can prevent ventilator-assisted pneumonia. Like, why would we clean a mouth, do mouth care. One thing that helps me is that I like to know why. Why are we washing the mouth out all the time? What's the deal when they're resting? But, it actually is proven to help prevent pneumonia. All those little things that we do are so important, and we don't know why though. And it's based on research. Hand washing. Well that's the standard. I don't know. Like our Foley care is based on that. Antibiotic therapy [unintelligible words] and being aggressive at first or not and feeding in the first twenty-four hours. I guess pretty much everything we do. Turn the patient every two hours. Stuff like that.

Likewise, Wilma perceived that pathways and protocols were based on evidence and nurses followed these. Wilma also perceived that knowing why interventions were done facilitated her ability to use the evidence; this is explored in the next chapter. The control belief that evidence was readily available in their pathways and protocols facilitated nurses' ability to use evidence in practice:

Well, we've got the same thing, the pathways with that. The CHF and pneumonia, things like that. I think it's good. They go by that. And we're starting a pneumonia one there for antibiotic protocol. We have a sepsis one. I think it's wonderful, there again, as long as everybody is trained why, the rationale - like hypothermia been onboard, and this is why. ... I think it's great, because you've got the evidence to back up and it proves it.

Nurses from the MH MS unit, as previously mentioned, perceived that almost everything they did was based on evidence. These nurses shared the belief that evidence was readily available and accessible in their standards, protocols, policies, and procedures. This control belief facilitated their use of evidence in their practice. For example, Barb perceived that evidence-based care documents were readily available. In fact, she perceived they were so accessible that nurses had a "roadmap" that they followed when they provided care. This "roadmap" made it very easy for the nurse to follow the evidence. Essentially, Barb perceived that using evidence in practice was "dummy-proof" in the MH MS unit:

Resources. I mean we have papers on everything. We have available reference information in our computers: policies and procedures, clinical standards, evidence-based stuff we have. ... We have our policies. They provide us with education - with sheets. I mean they provide us with a roadmap to do everything. So, it, you know, that dummy-proof thing that you do - you do what's there.

Similarly, Cathy perceived that evidence was available in preprinted orders, which she used to care for patients with wounds. Cathy's belief that the orders were evidence-based and readily available facilitated her use of evidence in wound care:

We see a lot of wounds too, and they have certain things. We have a med sheet that's already preprinted for skin care, things that we, something. If they have a skin tear, you use this, this, and this; because they've found that that helps heal a skin tear - or wounds, they will put the recommendations because we see wounds all the time. So, they tell us what we use at the bedside.

In the same way, Marcy shared that evidence was readily available in their diagnosis-based checklists, which were placed on the front of the chart and completed by various providers. Marcy perceived that it was easy to follow the evidence because it was readily available and "incorporated" into what they did:

I think really it's [EBP] just incorporated into one big thing. If you have your evidence-based practice, like your CHF's and your pneumonias and heart failures. ... But yeah we do; we have red sheets on the charts that have which ones - like stroke, CHF, or things like that, things that are on the front of the chart that have to be checked off - checklists that have to be checked off. We're just starting to do that with chemotherapy patients as well.

The majority of nurses from the MH ICU, like their MS unit counterparts, perceived that everything that they did was evidence-based. Nurses from this unit believed that evidence was readily available and accessible in their standards, protocols, policies, and procedures. This control belief facilitated their use of evidence in their practice. For example, Ethel perceived that evidence was readily available in their protocols and orders. Additionally, the evidence used to prevent ventilator-associated pneumonia was discussed during multidisciplinary rounds and guided development of an evidence-based checklist:

We use it during rounds, particularly like ventilator. Ventilator-associated pneumonia specific thing. Our evidence-based practice associated to deter that

is using Chlorhexadine mouthwash, elevating the head of the bed 30 degrees, using DVT and GI prophylaxis. So, we have all these little components that prevent - evidence-based practice that prevents the ventilator-acquired pneumonia.

Similarly, Betty perceived that evidence was available in protocols, bundles, and orders.

Nurses readily incorporated this evidence into their practice, which prevented known complications. Moreover, Betty perceived that it was easy to follow the evidence because it was readily available:

The protocols, the vent bundle. When we put in central lines, how things have to be done a certain way; the room is basically set up as sterile. The vent bundle we have - head of the bed up, chlorhexadine, and spontaneous breathing trials every day. You know, just everything's got an order to it. And I think that they keep it simple. They don't make it so complicated that you can't do it.

In the same way, Angela, along with her peers, perceived that evidence was readily available and incorporated into what they did. An example of this was the MH ICU's evidence-based checklist, which facilitated multidisciplinary rounds. This belief that evidence was available and incorporated in what they did facilitated the use of evidence in practice:

We have daily rounds. And on the list is patients with ventilator - make sure that they have head up, sedation vacation, chlorhexadine, DVT prophylaxis - all that stuff. So, it's a list when we are doing our multidisciplinary rounds every morning - that's on the list to make sure that stuff has been met. ... But it's a list of probably twelve items or so - fifteen items and abnormal labs, so everything is being addressed for this particular patient from abnormal labs to any family issues and everything in between. Is she eating? What goals do we have for today? So, I feel it's a very good checklist because then it decreases your chances of missing something. Yeah, we do it with every patient, which is really good. And then, after a while, you, as a nurse, you key right in, right? It's just like brushing your teeth every morning. It's highly unlikely that a patient is gonna be in the unit and not have Pepcid or something like that ordered.

Summary of control beliefs concerning embedded evidence. The majority of nurses from all units perceived that evidence was available in written care documents. Yet, the strength of this belief varied across units. A majority of nurses from the MJH MS unit were uncertain if care was guided by evidence. Many nurses from the MJH also perceived that they did not know how to find evidence-based care documents. In

contrast, nurses from both units at the MH had a strong belief that everything they did was based on evidence. This was reflected in the control belief that their care documents were evidence-based, readily available, and incorporated into their care. The readily accessible evidence-based care documents facilitated the use of *best* evidence. However, this was only valid as long as the documents were kept up-to-date. Nurses from all units shared that they did not routinely question what they did and that they also did not mention that they sought evidence as the illness episode unfolded. This was in contrast to how EBP is defined in this study, which maintains that clinical questions are asked and answered with evidence as the patient's illness progresses.

Control beliefs concerning resources and supplies. The amount of perceived available resources and supplies influenced the nurses' ability to incorporate evidence in their practice. In this study, the perception of having adequate resources or supplies varied across units. Most nurses from the MJH perceived that resources and supplies were lacking. In contrast, the nurses from the MH perceived that they had adequate resources and supplies. When nurses held the control belief that they had adequate resources and supplies, the use of evidence in their practice was facilitated. Nurses' perceptions of the control belief regarding resources and supplies will now be presented.

Staffing resource. A majority of nurses from the MJH MS unit perceived that inadequate resources hindered their ability to use evidence in their practice. Nurses most commonly perceived that a lack of nursing staff prevented them from following certain evidence-based guidelines, such as turning the patient to prevent pressure ulcers. For example, Chris believed that, when there were not enough nurses present to care for the patient/families, he was unable to turn them to prevent pressure ulcers:

Chris: One thing is the patient ratio. When you are on a medical floor, why you have many more patients to take care of and there isn't necessarily less per patient to do. Time emergency isn't quite as much. But, there is still the same amount of things to do per patient and too often; it is too many things to do in

twelve hours. As a result, then you have to make compromises. When you go home, you realize there was a lot you wanted to do.

Kim: Can you talk about some of those compromises?

Chris: Some of it is just simple, basic care. Somebody who can't turn themselves, and you can't get there and make sure they get turned. That is what the basic care is. Or, maybe somebody has a feeding tube and they are supposed to get free water every four hours. You don't get it there every four hours, and so maybe you only get there three times a day. So, you make sure they get the volume; but you didn't do it - it is like, if I give you the extra volume, is that going to be a problem for the patients? The other thing is, if you have got more you need to do in 12 hours, sometimes, if you didn't do something, you don't know that you didn't do it. So, you don't have time to reflect back and say, wait a minute; do I need to catch up on this? It is, if you didn't know that you didn't do it, you can't get with it and fix it.

Similarly, Lucy perceived that she was unable to do everything that was needed for the patient/family when there were not enough nurses. The lack of nursing staff prevented Lucy from doing evidence-based care, such as turning:

There are times, even with four, depending on how sick they are, where you feel like, ah, I wish I had a little more time. A little more help. Sometimes we're stretched a little thin, to be honest; and so you do the best you can but always - on those days you come away going, I wish I could've done better for the people there.

Likewise, Francesca perceived that she was unable to follow the evidence when there was inadequate nursing staff. Additionally, Francesca perceived that a shortage in ancillary unit staff also prevented her from using evidence in her practice. When the unit was short-staffed, Francesca perceived that she found herself doing other peoples' jobs and not her own:

You just muddle through, but the patient care goes down; it has to. You have five patients, no secretary; you're putting the orders in - you have no other tech but one who can only probably do vital signs; they can't do baths; they can't clean up - so you're constantly going to the rooms doing the other person's job. And you're not doing yours; so it's very frustrating, very. That's like my biggest complaint. ... We talk about patient care, patient care, patient care, and we want all these satisfactory surveys, then make sure that we can give good patient care. But we can't if you're on our floor; five patients is a lot. Because a lot of them are very sick, a lot of total care, and it's difficult; it's very, very hard. ... They've got to be changed; you've got to change them; and they have wounds and stuff. So, to be well staffed is a huge, huge.

Similar to their counterparts in the MJH MS unit, the nurses from the MJH ICU perceived that being short-staffed influenced their ability to follow the evidence. For example, Wilma perceived that the lack of nursing staff prevented nurses from following evidence, such as turning the patient. Also, she perceived that the lack of nursing staff resulted in uncompleted patient care interventions that might not be based on evidence. Additionally, Wilma perceived that there was a “lack of enforcement” of standards, which implied that evidence was not routinely followed when there was a shortage of nursing staff:

I think everybody means well; but the staffing ratios and equipment, same thing. You have a bed with a patient that you cannot turn in it. And it's being documented, but is it really being done? I could tell you there are times it's not. There are times that patients didn't get - now there are situations where the patient is too unstable - certainly, whatever is going on; but they were tripled and this leg got the attention and this didn't. So, I wouldn't say it's bad nursing care; but we have a long way to go to get back to where things are enforced.

Likewise, Tom perceived that the lack of resources, such as staffing, impeded his ability to provide required care. Tom did not specify whether the care that he could not provide was evidenced-based or not. The care that he alluded to ranged from basic care, such as bathing, turning, or changing dressings, to the more complex skills, such as assessing and monitoring:

And I think that's definitely impeding on the safety of all our patients. ... That, to me, still seems to be the biggest problem - just because I've had so many days, where I have tripled and I've felt like I walked out of the day going, “You know, I was supposed to provide intensive care and I couldn't.” Because I had to separate it, so it becomes essentially a third, a third, and a third intensive care. It's just difficult in that sense.

Similarly, Ricki perceived that the unit was short-staffed. However, he did not tie this to his inability to provide care or follow the evidence. In general, nurses, when they talked about being short-staffed, perceived that they could not provide the care that the patient required. This perception varied from their inability to provide basic care, such as turning

and bathing, to more complex care, such as assessing and monitoring of the patient's condition:

We need more nurses. ... We have 16 beds. That's 8 nurses, four on each side, occasional one-to-one so you bring in another nurse. But maybe you don't have 16 patients; you have two less and you have three nurses for six patients. That's still - the ratio is still good. But what happens when a patient comes? And it's always going to happen. ... So what do you do? Well, then you triple. Heaven forbid if the patient is a one-to-one. So now, somebody's got to take that patient, which means the other two nurses have to take somebody else. ... And really, what it comes down to is we don't have the staff. Maybe, certain people have worked four or five days already and they don't want to work that sixth or seventh day. I mean, who wants to? ... A few do, but not all of them. So then logistically, our staffing is a little low. ... I mean my biggest complaint is all about staffing. ... I think, for nursing, the biggest issue is the ratio - the nurse to patient. That's the biggest thing. It could be, definitely, a lot better.

Similar to the nurses from the MJH, two nurses from the MH MS unit perceived that the unit was short-staffed. One nurse perceived that staffing was not an issue. The other interviewed nurses did not mention any concerns related to nurse staffing. Considering the lack of data on whether nurse-staffing levels influenced nurses' ability to use evidence, no conclusions could be made for the MH MS unit but here are the few examples from this unit. Mona perceived that inadequate nurse staffing influenced her ability to provide patient care. Mona perceived that the workload was too demanding and that she could not complete everything that needed to be done:

But aside from that, the whole floor being so busy, having so many patients. ... There are just not enough nurses. So, it gets pretty overwhelming. It gets really busy. We get days, mostly during the week - it gets crazy. Like what I said with the patient ratio, ... we get a maximum of 6 [patients] in our unit. And we have certain rules. ... See, like on the weekends, you don't get the six patients because we don't have our PCLs around - so you only get 5. If you're giving the chemo, you don't get the maximum amount; because they're a lot of work - you have to do a lot of things. But that doesn't happen. Those are the days that you can count on being overwhelmed with stuff. ... But there is still sometimes - what happens is we get a lot of post-op patients. Well, mostly they're not the problems. Because, the past few days, we have a patient who gets chronic pain medicine every couple of hours.... Every two hours here and there - and at one point I have two of them that's every hour; sometimes it gets too much. ... Most of the time, we are really short anyway to begin with. We have to pull nurses to help us.

Likewise, Marcy perceived that the workload could be heavy when there were not enough nurses to care for the patients. When she was in this situation, Marcy perceived that “things were missed.” Marcy did not specify what was missed; but, when care interventions were not completed, there might be some evidence-based interventions, such as turning the patient every two hours, that were overlooked:

Here it's insane; it's busy. They see that. And a lot of things started to get missed, because we could start out with six patients. It's nice when we start out with five, and then go to six; but even that's too much, especially with how heavy the floor is - it's just rough. It's rough on a nurse. ... I think mostly it's just the stress that's placed on us and the amount of patients that we get in a day and the amount of work that we're expected to do in a day. You have six patients, but all of them could be total cares. How can you do that? How can one person do that? How can you be in six rooms at once? People jumping out of bed, people in restraints, people needing Haldol, Ativan, Dilaudid every three hours; it's rough.

On the other hand, the remaining nurses from the MH MS unit did not mention that staffing was an issue. Barb was the only nurse who perceived that the unit was not short-staffed. But, she did perceive that she “gambled” every night when she made assignments. This suggested that, even though Barb perceived that there might be adequate nurses to begin the shift, this might change as the patients' conditions or the amount of patients changed over time. If this did occur, there might be a shortage of nurses: “I don't feel that we are short staffed. You staff for what you have and you never staff for what you expect; so I feel like I gamble every night.”

Unlike the other units, the majority of nurses from the MH ICU did not perceive that they were short-staffed. Nurses from the MH ICU shared the control belief that they had adequate nursing staff and that they were able to carry out patient care interventions. Considering their previously mentioned perception that everything they did was evidence-based, having adequate staff in this unit facilitated the use of evidence in their practice. For example, Ethel perceived that the unit had adequate staffing: “We have enough staff.” Likewise, Greta perceived that “tripling” was uncommon in the unit: “Sometimes, we have to triple. ... They are willing to do that because they know that we

are not really always doing it. ...You're not really short-staffing just to meet the budget." Similarly, Yolanda perceived that the norm in the unit was for each nurse to care for two patients. Yolanda continued that, sometimes, the nurse could be assigned three patients: "Two patients, one if they're a one-to-one critical or CRT [continuous renal therapy], or 3, if we're short staffed. Uh, mostly two.... " Nurse-staffing levels did not interfere with the nurses' perception that they provided evidence-based care in this unit.

Summary of staffing resource. The nurses from both units at the MJH perceived that they did not have adequate nurse staffing. They also perceived that inadequate staffing hindered their ability to complete patient care interventions, which might or might not be evidence-based. The control belief that having inadequate resources hindered the nurses' ability to implement evidence in practice was present in the MJH. A few of the nurses from the MH MS unit also held the control belief that, when there were not enough nurses, they were unable to complete all patient care interventions. In contrast, a majority of MH ICU nurses perceived that the unit was not short-staffed. They also perceived, as previously mentioned, that everything they did was evidence-based. The control belief that having adequate staff facilitated their use of evidence-based interventions was present in this unit.

Supplies and equipment. A majority of nurses from the MJH MS unit perceived that inadequate supplies and equipment prevented them from using evidence in their practice. For example, Grace perceived that a lack of vital equipment impeded her ability to carry out necessary patient-care interventions; these interventions might or might not be evidence-based. However, the equipment, which she perceived was unavailable, included suction heads and oxygen adapters. When this equipment was missing, it hindered Grace's ability to suction and provide oxygen to the patient. Both of these interventions were evidence-based and both assisted in maintaining the patient's airway and oxygenation:

If somebody comes in and has a GI bleed and he has vomited in the ER, for instance, and they're going to come to our floor, you've gotten a heads up about it. ... There should be wall suction there. You have to have it ready. ... But you can't find a wall suction. ... I mean it is bad sometimes when you bring somebody in; they need to put them on oxygen, and you don't have a cone - that Christmas tree. That's pretty bad, and you have this all the time - and that was one of the complaints with respiratory. So, we take it for granted that every room should have it; but they don't, they don't.

Likewise, Silvia perceived that certain emergency medications were not readily available on the unit. The MJH MS unit was a cardiac telemetry unit. At this level of care, it would be expected that certain emergency cardiac medications were readily available to treat various cardiac arrhythmias. The use of certain cardiac medications to convert an irregular heart rhythm to a regular heart rhythm was evidence-based and not having the necessary medication hindered the nurse's ability to administer the medication. Silvia shared a story in which a patient went into rapid atrial fibrillation and she had to go to another unit to procure the required medication to convert the patient's irregular rhythm to a normal rhythm:

My patient, who went into atrial fib and had a heart rate of 170 all of a sudden, and he wasn't looking very good. So, I got the cardiologist. Actually, he came; I think he was there within 10 minutes. And he said let's get some, he wanted a Cardizem drip eventually, but he wanted Adenosine first. And I had to get that, so I ran to CCU [Coronary Care Unit] and I got that. And I like getting rid of atrial fib when it's new; I like to get rid of it as soon as I can. So I had it; I got it for him, had the patient converted to SR [sinus rhythm] within about 20 minutes; and he said, "I don't think that I ever got Adenosine quite so quick in this hospital ever!" I said, "I used to work at X hospital and I was on a cardiac unit for five years, and we got it quick because we knew we wanted him out!"

Also, Silvia perceived that the wound care nurses wrote orders on how to treat various wounds. Wound care orders were widely known to be evidence-based. However, Silvia encountered situations in which the ordered wound-care supplies were not available on the unit. In these situations she improvised and "did the best she could":

Silvia: We have good wound care nurses here, who come and do the work if they can and initially they do it. They write clear orders for how to do it, and then it has to be continued - as closely as we can to what they want us to do.

Kim: Do you usually adhere to their orders?

Silvia: We try really hard. Sometimes they say to put this on it and put this kind of dressing - you go to the PYXIS [supply station], and there isn't that kind of dressing there. And because of stool or whatever, you've got the whole body exposed - you have to dress it, so you do the best you can to cover it like they want it covered.

Similarly, Lucy shared the same perception that there were inadequate wound care supplies. The lack of supplies hindered her ability to complete the evidence-based dressing change. Like Silvia, Lucy "improvised":

Lucy: Don't have that. Okay, improvise with what you've got. Uh, okay. This isn't great, but okay.

Kim: Does that happen a lot?

Lucy: Time to time, yeah, yeah.

Furthermore, pressure-ulcer prevention guidelines stipulated the use of some type of pressure-relieving mattress. These guidelines were commonly known to be evidence-based. Lucy perceived that there was a long delay in securing the pressure relieving or "Gaymar" mattress from Central Supply. This delay in obtaining the pressure-relieving mattress impeded her ability to use evidence in practice and put the patient at increased risk for a pressure ulcer:

Sometimes you got to wait several hours, five, six hours for that Gaymar mattress to get up there. And then it's like the family's really - how long does it take? I'm doing everything I can. That's when it's difficult, because you're looking like - why can't you get this done, and you're feeling very frustrated and incompetent - and yeah we're calling. It depends on the person that's down there, how many deliveries they have to make throughout the hospital. There's only so many down there that are working to make all these things. I say we're really trying to. I'll go to the secretary, "I need this yesterday, okay. Can you make this happen? I need it yesterday. Please, this family is very upset because they've been in the hospital before; they've gotten skin breakdown - and we really need to act on this right now." ... Then you work your shift up - trying to get that kind of thing done.

Identical to their peers in the MJH MS unit, a majority of nurses from the MJH ICU shared the control belief that the lack of supplies and equipment hindered their ability to incorporate evidence in their practice. For instance, Sarah perceived that

supplies for pressure-ulcer prevention and wound care were not readily available in the ICU. The needed supplies could be ordered, but there was a perceived delay in their delivery to the unit:

If I need to get something for the patient, there is a whole new system that it is tracked in now that's supposed to be better. It's not better; it's more time consuming - but I think it's tracked for money purposes. I might have to wait four hours for something. Yesterday, I put in an order for heel protectors, something so simple; but it wasn't something that I could just go and grab - it's not a floor stocked item, and that's specifically tracked. It has to go into this one system, and you have to basically wait.... .. While I've got the dressing open and I need it now, something that wasn't surprising that you didn't know you needed or whatever. Or the physician showed up at the bedside, and now you need whatever and it's not there. You have to order it and wait.

Likewise, Tom shared a story in which they had two hypothermia-protocol patients at the same time and did not have enough cooling blankets. One of the hypothermia-protocol patients had one cooling blanket and it was insufficient to cool them. Inadequate equipment impeded the nurse's ability to follow the evidence-based hypothermia protocol, which resulted in a poor patient outcome:

I'm trying to remember the one. I don't want to say it, but the one where we actually had two at one time. One lady we couldn't control very well and she heated up too fast. And there were some thoughts as to why she coded during that time. She did not have a good outcome. ... And she only had one blanket on. And they were trying to keep her cool, keep her cool, keep her cool. It was harder to keep her cool but easier to warm her up. Unfortunately, I remember that scenario; she coded and didn't make it. ... Without the second blanket, they warm up too quick. So, that becomes a problem. Actually, I don't know but I think we still just have the two blanket warmers.

Along the same lines, Wilma perceived that faulty equipment prevented her from providing care that was evidence-based. For instance, Wilma shared that beds did not work properly, resulting in patients not being turned, as they should be to prevent complications, such as pressure ulcers and pneumonia. Also, Wilma shared that the intravenous pumps that they used were antiquated. In fact, the intravenous pumps had been recalled by the Food and Drug Administration (FDA) because they lacked certain required safety features that were known to prevent poor patient outcomes:

And equipment, it's been a big thing for me. Beds not working, they should turn and inflate and they don't. Pumps and same thing; I heard that they're [the hospital was] mandated by FDA to provide us with new pumps. It's a federal - because they fail, the old; there's a lot of stuff that can go wrong with them. But I asked the head of one of the departments; I said, "When's it going to happen?" It was already, like, they got fined. "Oh, it will be another year until we get new pumps." And I'm like, "Are you kidding me?" And she said, "Well, you know, the FDA found that they need to be taken out of service...." It's money.

Furthermore, Wilma perceived that "money" influenced her ability to incorporate evidence into her practice. She perceived that the use of faulty equipment and/or the lack of equipment were the result of a lack of funds to replace or fix the equipment:

Money impacts my ability to follow the evidence and do the right care, absolutely. Money with your supplies, your equipment, and actually doing the care; because you can't do it if you don't have decent suction equipment. Even if you have bodies, you have to have this stuff and you can't carry it out. ... But that was a very big thing that was horrifying to me when I went there - there was no hot water in the rooms. I almost had a cow and a calf because I wash my hands constantly. What do you mean you don't have hot water? Well, this has been like this for a long time. This is an OSHA - there has to be a certain temperature. And then, like I said, they got fined. And then, that finally changed. And I was amazed that some of the conditions that unit was working under and that a lot has changed since a year.

In contrast, nurses from the MH MS unit unanimously agreed that they had adequate supplies and equipment to provide care. The needed supplies and equipment were used for evidence-based interventions, such as wound care, or for routine care. For instance, Cathy perceived that necessary equipment, if not available on the unit, was readily available on another unit. She also shared that, if she needed wound care supplies, they were on the floor or readily available. Having the wound care supplies readily available, facilitated Cathy's ability to follow wound-care evidence-based guidelines:

Cathy: For the most part, yes. I haven't seen it, yet; but I think, sometimes, with your heavier patients, you need more equipment close by, instead of having to borrow it from another floor, like a Hoyer lifter. But I think, for the most part, we have everything we need.

Kim: If you needed things to do wound care, is it a hassle to get what you need?

Cathy: ... For the most part, everything is stocked, or you can get it quickly. For the most part, we have - we're pretty good stocked.

As well, Barb perceived that vital-signs-monitoring equipment frequently "disappeared." However, she did not perceive that this influenced the nurses' ability to obtain vital patient information, because the Unit Manager quickly replaced necessary patient care equipment:

Pulse oxes always disappear. We're forever looking for them. I know management is going to get us more; but, right now, we've got locked drawers where a charge nurse is going to have the key so we always have one. ... So, you ask and you generally get what you need. But then it's a matter of controlling what you need and always having it when you want it, need it. ... And she'll [Unit Manager] say, "What equipment do we need?" and helping to get it and that kind of thing.

Similarly, Paige observed that equipment broke down or went missing. The Unit Manager would fix or replace equipment in a timely manner so that it did not influence the nurses' ability to provide care:

Things break down, we tell her [the Unit Manager], and she does what she can. ... If we ran out of saline syringes - we called the storeroom, and they brought up big boxes - we don't have any problem with that. ... We've had equipment, I think, stolen. Whoever does it, I don't know - like an electronic thermometer or whatever is not tied down - I think it just picks up and goes, because we have had six of something on the floor; and, all of a sudden, we are down to one. ... Yeah, we complain; our Dinamaps are all empty - we don't have this; and this one breaks down - and where's our pulse ox - and she bought some extra pulse ox; and we put that in CN3 office.... ... Where do things go? So, you tell the manager - we can't find the pulse ox. ... So she buys more, she buys more, and then she wrote names on them - number one, number two. ... So, it's like she is always buying stuff. It's not like she is saying, "I am not going to buy anymore." It's just - yeah, yeah - that's a big thing and those are big money things too....

Likewise, the nurses from the MH ICU perceived that they had adequate equipment and supplies to provide care. Of the eight nurses interviewed from this unit, only three nurses mentioned that they had enough supplies and equipment. The other nurses never mentioned any concerns regarding equipment and supplies. This was in stark contrast to the MJH nurses who consistently mentioned that they were short on supplies and equipment when asked what they would like to change in their unit. For example, Ethel observed that they, "always have enough supplies and equipment to do

what we need to do.” Yolanda also perceived that the unit had “great” equipment and “enough” supplies. Nurses who floated to the unit validated this perception. The nurses from this unit perceived that everything they did was evidence-based, so having adequate supplies and equipment facilitated their ability to incorporate evidence into their practice:

We have great equipment. That’s huge; people who constantly come in our unit say all that. They worked here and worked there. Our nurse manager is - I don’t know how she makes budget; I honestly don’t know how she makes budget because I think that we have so much. It’s like I don’t feel there’s anything that we don’t have. We have enough supplies and equipment.

Similarly, Betty observed that they “always” had adequate supplies and equipment:

“We’re always good on our supplies.... They keep things in repair. ... Things get broken. The maintenance guys are up there right away.”

Summary of supplies and equipment. Nurses from both hospitals agreed that supplies and equipment were important and influenced their ability to implement evidence-based interventions. For the MJH nurses, the lack of supplies and equipment was believed to be an obstacle. MJH nurses shared examples of when they could not follow evidence-based guidelines, such as wound care, because the necessary dressings were not readily available on the unit. In contrast, for the MH nurses, readily available supplies and equipment was believed to facilitate their use of evidence-based interventions.

Control beliefs concerning information sources. A majority of nurses from both hospitals shared that, when they came across something that they did not know about or how to do, their primary source of information was their peers. This control belief was discussed and presented above. The second most commonly mentioned source of information was the computer. Nurses believed that the computer facilitated their ability to obtain information on diseases, procedures, medications, and tests. Nurses shared that they used the Internet and the hospital’s Intranet to obtain

information. Most of the nurses were unsure if the information that they obtained from the Internet was of good quality. However, most nurses were aware that the information that they obtained from the hospital's Intranet was evidence-based. The control belief that computers provided information to answer questions concerning medications, diseases, tests, and procedures both helped and hindered nurses' use of evidence in practice and depended on the information source.

Source of information: computer. The computer was the second most frequently cited source of information by the nurses from the MJH MS unit. Nurses shared that they primarily used the computer to obtain information on medications, diseases, procedures, and tests. When using the computer as an information source, nurses shared that they searched the Internet and the hospital-based Intranet. For instance, Francesca shared that she used "Google" to get information regarding tests and/or disease the patient had. When asked how she knew that the information she obtained from "Google" was of good quality, Francesca shared that she looked for a "reputable" site and verified the information with other disciplines or departments. She also shared that she used online resources available at the hospital such as the Pyxis® Medication Station to obtain information on medications. According to the manufacturer, the Pyxis® Medication Station provided evidence-based information. Having the computer readily available facilitated Francesca's ability to obtain evidence-based information, especially when she used sources found on the Intranet. However, Francesca used the information she obtained from both the Intranet and Internet to inform herself. It could not be determined if this information influenced the care that she provided:

Francesca: I Google it. Oh, all kinds of tests, like I didn't know what this one thing was - Dr. Blank wrote something; it said LTM, which I wrote down LTM and I couldn't read Dr. Blank's handwriting.... LTM is with or without video or bedside something. I said, what the heck is this? I don't even know what this is. So I Googled it, and it's like long-term monitoring of electro-something graph. ... I'll

Google that – or, if there's something that a patient has that I've never heard of, I'll Google it. Diseases, just a word, or a test, like people will write and I'll say, what the heck is that? What does that do? And I'll Google it.

Kim: How do you know that the information that you get on Google is good?

Francesca: Oh I make sure that, I mean I'll go to a site that I know is reputable, like Med Agape or something. Usually, for meds I always go to the PYXIS for something like that. For tests, I'll look and see if that's right and then I'll call. When I found out it was an EEG, I just called down to the EEG department and asked, hey, what is LTM; I don't even know how to put this thing in; I don't even know what it is - and they'll explain to me what that is. So asking. So the next time I'll know; when I see that, I know exactly what it is, which is cool.

Similarly, Cindy shared that she used the computer to look for information when she encountered unfamiliar medications or diseases. Cindy shared that she accessed Micromedex CareNotes® on the Intranet to find information on diseases and medications. According to Micromedex CareNotes® website, they provided evidence-based information that was peer-reviewed and updated on a frequent basis. Having the computer readily available facilitated Cindy's ability to obtain evidence-based information when she accessed evidence-based sites on the Intranet. Cindy shared that she frequently looked up information on medications on CareNotes® and used this information in patient/family discharge teaching. Also, Cindy shared that she accessed Micromedex CareNotes® to obtain information on the HELLP Syndrome, which is a disease process. However, there was no mention that she incorporated evidence-based findings in the care plan. It appeared that her search for information on the HELLP Syndrome was for informational purposes only. Cindy shared that she did not routinely search for information on diseases, because it had been five months since she looked up the HELLP Syndrome:

Cindy: I had...a patient that went into that [HELLP Syndrome] over in the Women's Center, went to the ICU, and then she came to our floor. So,...I was even calling the Women's Center and, how rare do you see this? And they were like, we barely see it, but it does happen; it can happen, it's a complication. ...

Kim: What else did you do?

Cindy: After we called the Women's Center, they kind of gave us a general overview; and then I went on the Intranet. We have Micromedex CareNotes® system loaded in our computers at the hospital. So, I went on there and researched some more of that. ... We usually use it [CareNotes®] mainly on discharge or for patients who are newly diagnosed with atrial fibrillation, who gets started on Coumadin, or things like. It's a medication or even diagnosis or condition-related site. You can just type in whatever you are looking for. ... And then, as far as nurses, when we are looking up certain conditions, it has all these links; almost like Google, where it has all this big old list of links, and you can just click on it; and it goes over research that was done on that condition and how to read up more on it. It's like a Google site but mainly for the hospital.

Kim: What was the last thing you searched for in CareNotes®?

Cindy: The last medicine that I searched in there was probably Coumadin, because I discharged somebody yesterday who was newly diagnosed with a fib.... As far as the conditions - the last condition I probably searched in there was the HELLP Syndrome - uhm, like February [interview occurred in July].

Likewise, Mary used the computer to obtain information about unfamiliar diseases and medications. Mary shared that she used the Internet and "Googles" to find information. Mary shared that she only used "reputable" websites, such as the Center for Disease Control and Prevention, to gather information. She also used the Intranet or Pyxis® Medication Station to access evidence-based medication information. Having the computer available facilitated Mary's ability to obtain evidence-based information; however, this was done for informational purposes and not to change the plan of care:

Kim: Do you have an example of a time when you used the computer to get information?

Mary: If somebody would come in with something different, like I forgot the highlights. I needed the highlights on their disease. We look things up like that, if it is something that we don't see that often. Also medications, I'd look it up on the computer, actually. But it is a part of the Intranet, because I look it up under the CareNotes®. We have drug books sitting there on the unit; pharmacy is available.

Kim: When you go online, where do you go?

Mary: It depends. I have the CareNotes® on the Intranet that I could go to. I also have the Pyxis®. There is a place where you can go to all of the medications; that is really good...I like to go on there. And, a lot of times, I will just Google it, yeah - I'll Google it. And I'll pick something that is reputable, you know, reputable sites.

Kim: How do you know it is reputable?

Mary: Because it is the CDC [Center for Disease Control] or something like that. I will stick with that kind of thing. We keep PDM [do not know what this stands for] there. I mean, that is another one that is reputable. Not just any old site.

Similar to the nurses in the MJH MS unit, a majority of nurses from the MJH ICU used the computer as a source of information on diseases, medications, tests, and procedures. They frequently obtained information from the Intranet, which contained evidence-based sites. They sought out information because they were curious about the disease(s) the patient had or about the medications and procedures that were already prescribed. The data showed that they did not use the computer to obtain information on how to do things differently. For example, Bob shared that he used PubMed and UpToDate® to obtain information on medications and diseases he was unfamiliar with. Both of these sites had evidence-based information readily available. The information was not used to change the plan of care but rather to collect information on interventions that had already been decided. Bob perceived that nurses did not question what they did but relied on experience and what they had been taught:

Bob: I have it [access to PubMed] through school... I think it would be available; but I, I see that it is available. I'm pretty sure that it is available. But I'm just so used to accessing it through the school. I'm pretty sure that I have seen PubMed on the main page when you open the Intranet for nursing. ... They have UpToDate®. ... That's, you can look up basically diseases; that's good just to look up diseases.

Kim: Can you obtain research through UpToDate®?

Bob: I haven't ever got research through that. I've always just did PubMed, but I'm more familiar with PubMed. ... I hardly look things up at work. I will usually do it later.

Kim: What would make it happen at the point of when you are providing care?

Bob: I don't know. I mean, I, we all will look up things if we aren't sure about it. We look up things and find out about it before we do something if we are not sure about it - or call the pharmacist and talk to the pharmacist or talk to the physician.

Kim: What kinds of things do you tend to look up?

Bob: Uhm, uh, drugs and disease process - things like that.

Kim: Do people question nursing practice, or do they just do what they've done?

Bob: Uh, I mean, I, uh, I think people will, um; I don't think they question it as much.

Similarly, Tracy used the hospital's Intranet, where she accessed Micromedex® to obtain evidence-based information on medications. Tracy shared that she used the Internet to obtain information on diseases she was unfamiliar with. Tracy shared that she used Google Scholar and avoided Wikipedia, which she did not "trust." The computer facilitated Tracy's ability to obtain evidence-based information on interventions that had already been decided:

Tracy: I guess the main thing I look up on the computer is meds. I don't know all the meds. But I feel comfortable with most of them. But, every once in a while, I'll see one that I don't really know. But we have a system called Micromedex®. So, I'll look up that. And I'll even look at the family version that makes it like word dumbed down or whatever. And I'll read that so that I really understand what I'm reading. Sometimes I'll Google stuff. I used to whatever. I'll look on Google sometimes honestly. I'll look at things.

Kim: What kinds of things do you Google?

Tracy: Diseases, if you don't understand what's really going on. But I don't go on the computer all the time - for looking things up. But, even if I got through the day, sometimes I'll look in my textbooks for different things.

Kim: How do you know that the information that you get from Google is good?

Tracy: They have Google Scholar. I don't go to Wikipedia or anything. I don't trust it.

Likewise, Dawn used the computer to obtain information on diseases and medications. She primarily used the hospital's Intranet for medication information, and this information was evidence-based. Dawn shared that she used "Google" to retrieve information on diseases and was not always sure that the information that she obtained was of good quality. However, she shared that she did not use Wikipedia as a resource. Dawn perceived that the information she gathered was used for informational purposes rather than to change the plan of care:

Dawn: All sorts of things. I had a patient with multiple myeloma last week, and he was in renal failure. And I'm like, is that an aberration, or is it typical for multiple myeloma patients to have renal failure? And I didn't know how the whole process occurred due to the proteins and everything. And I didn't know that. So, that's what I Googled a couple days ago. ... For things like medications, we'll go to the pharmacy or to a drug book and more to the Intranet - it's a good source for information.

Kim: How do you know that the information you get from the Internet is good?

Dawn: You don't always know for sure. All the sites, you don't know what you're really getting. You just cross your fingers and kind of hope. I hate to say that; but, if this is something you have to take care of right away, you don't have time to look through and individually read all the journals, per say. And you hope it's -- you don't go to Wikipedia; obviously, I'm not gonna treat a patient based on Wikipedia. But do I know everything that I'm reading is accurate? Not always.

The majority of nurses from the MH MS unit also used the computer as a source of information. However, unlike the MJH nurses, they commonly looked up policies, procedures, standards of care, and medications on the hospital's Intranet. This information was evidence-based and they used these documents to guide their practice. Similar to the MJH nurses, they did not tend to question the current care that they provided or to seek out alternate methods of doing so. They also shared that they used the Internet as a source of information on diseases, medications, tests, and procedures and they looked for reputable sites. The information obtained from the Internet was primarily for informational purposes. For instance, Cathy shared that a patient was receiving a therapy that many nurses were unfamiliar with. The policy and procedure was retrieved from the Intranet, and the evidence-based content was used to guide practice. Cathy shared that she used evidence-based sites, such as Pyxis® (Intranet) for medication information and Medline Plus® (Internet) for diseases and procedures that might have been ordered for the patient. Cathy used the computer to obtain evidence-based information, which guided her practice as well as informed her:

Cathy: We have a patient who is getting peritoneal chemo. I've never done that, and most people haven't, because it's something new that we are doing there. And they print out from our computer policies and procedures on how to do

specific things. So we had one on that, they printed it out, and you just follow it step-by-step how to do that. ...

Kim: Where else do you go to look things up?

Cathy: If it's a med, I just do the Pyxis®; they have the med thing in there. Or I'll Google it sometimes.

Kim: What kinds of things do you usually Google?

Cathy: I guess, different procedures. When I first started, I couldn't remember what a HIDA Scan was. ... But I remember doing HIDA Scan frequently, because it wouldn't stick in my head. ... And I look on Medline Plus®, that's usually what I, MedlinePlus.gov, that's what I used for school, so that's the one that I always remember.

Kim: What kind of things do you look up on Medline?

Cathy: You can look up drugs or diseases. ... I just learned how to do this recently...but you can right click on a medication [in the eMAR], and it prints out a smaller form of a medication description, like one to two pages, instead of sometimes, if you Google it, you look up the med, it's eight to ten pages long. And the patient is like, "ugh." So, that's actually nicer; and, anytime they go home with a new med, that's what I always print, is just from our computer. So, that's nice.

Likewise, Barb used the hospital's Intranet to retrieve evidence-based policies, procedures, and standards, which she used to guide care. Also, Barb obtained evidence-based information on medications and diseases from the Intranet. In addition, Barb used the Internet and Google to look for reputable sites like a manufacturer's site for medication information. Computer access facilitated Barb's ability to obtain evidence-based information, which she used in care or for informational purposes. Barb was unique in that she only gave patient/families information that had been approved by the hospital and was available on the Intranet:

Barb: You have things you don't deal with very often, like a prisoner situation; and we'll go online, get the policy and procedure, and print it out. Then there are all our clinical standards that you follow. And you put it on the chart and you follow it. They are right on the Intranet, yeah; it's right there for you. Print it out and put it on the chart. ... I've done that. I do that every day. ...

Kim: Where do you go to find information on medications?

Barb: There's information in the Pyxis®. The Pyxis® is not the easiest thing to use. But on the Intranet we have a page with references, and it's DynaMed; and you just hit your med, and it's right there. Lippincott's in there, or anything you could want is in there. ... I'll go to WebMD, go to the manufacturer's site and get information. We had a chemo drug yesterday that I'd never ever heard of before. And we went to the manufacturer's site and just printed out everything. So we can, you know, computer anything we want. ... I Google 20 times a day.

Kim: What types of things do you Google?

Barb: Mostly, honestly, a doctor will write an order for a lab and he writes it a different way or he writes initials, and we have no clue what he's talking about. So we Google to see what it is. ... I'm a basic Googler.

Kim: How do you know the information is good that you get?

Barb: You don't always know. You have to make the right decision. Hopefully, you don't take it from a site, you know - Wikipedia is not my choice. ... I'm careful what I look at. And I don't print things out for people that aren't official. I'm going to use what the MH puts in the computer. It's what they want you to use. So, I'm very leery of giving anybody anything printed that wasn't part of our system and approved.

Similarly, Debbie shared that she used the computer to acquire information on unfamiliar diseases, procedures, and diets. She utilized evidence-based sites such as the hospital's Intranet or a download for her telephone. Debbie shared that she used the Internet and Google to obtain information but she was uncertain if the information was of good quality. She did share this information with patient/families but provided them with a disclaimer that the information might or might not apply to their situation and to always follow the advice of their physician. Also, Debbie perceived that evidence-based policies and procedures were retrieved from the Intranet when nurses were unfamiliar with what to do. The computer was a source of evidence-based information and Debbie incorporated evidence in her care based on hospital policy and procedures. However, like the nurses from the other units, Debbie did not question what she did or looked to the computer to find evidence to support changing practice:

Debbie: I have my drug book and my Tabor's in my phone that I carry with me. So, I can always look that up. ... I'll use computers. I look up procedures, diseases, and diets.

Kim: Do you ever go to the computer and look for research to support doing something differently?

Debbie: I haven't. ...

Kim: Do you use Google?

Debbie: Yeah. That's the main thing I do.

K: How do you know that the information you get on Google is good?

Debbie: I always look through it at least. I'll try to, there are certain things that we have like, diets and the medications and stuff we use. There are certain links that we don't have to use Google for. ... But, if it's like - I have an example; I had a patient who was having a bowel resection because of diverticulitis. And so I Googled bowel resection, the procedure, the surgery, and then diverticulitis. I printed that out. I went to the patient and I said, I'm just giving you a pre-warning. This is information on it. If the doctors have told you anything different than what you're reading, you could question it. But I would go with what the doctors are saying, because it's always going to be different case-by-case. And so, I always try to give that warning; so patients aren't going to their doctor, well I got this; and this is what it says. And so, I just try to make sure that they know it might not be right or it might not pertain to you.

Kim: How about standards of care or protocols?

Debbie: Yeah, we like policy and procedures – “the book.” ... They are on-line. If there's something new or not as common, the patient care leaders are good at printing those out. They're just punching them and putting them in the chart, so it's there.

The majority of nurses from the MH ICU also used the computer to retrieve information. They most commonly looked up evidence-based care documents, medications, diseases, and procedures. They used the hospital's Intranet, which provided evidence-based information. They also used the Internet and Google, on which they were less certain if the information was of good quality. The information retrieved from the Intranet was used to provide care, and the information from the Internet was primarily for informational purposes. Similar to the nurses from the other units, nurses from the MH ICU did not tend to question current care or to seek out evidence to change practice. For example, Ethel shared that she accessed the hospital's Intranet to obtain evidence-based information on medications and protocols. This information was used in

her practice. Like nurses from other units, Ethel shared that she did not question her practice or use the computer to gather evidence to change practice:

Ethel: We'll look up different medications. One thing we look up a lot is which medications we can mix together, which is a big thing because we have so many different pressers and things. So, we have a pharmacy resource on our computers that lets them see which drugs are compatible. That's the big thing to look up. Or sometimes I just pull up information for family members about their loved one's illness so that they can have some more information. ... I've had to pull up different protocols on measuring intra-abdominal pressure. ... For staff to have at the bedside.

Kim: Do you question nursing practice and wonder if you could do things differently? Say the patient had a procedure and typically you keep the head of the bed flat after the procedure, do you question if you really need to do this?

Ethel: Uhn, ah. We obey them. We might put them in reverse trendelenberg so that we can raise them up, keeping them flat but raise it so that they can eat or drink. But no, we wouldn't; we would obey the order.

Likewise, Jill shared that she accessed the hospital's Intranet to obtain evidence-based policies, procedures, and information on medications. This evidence-based information guided her practice. Jill shared that she also used the Internet and Google to obtain information on diseases, tests, and procedures. Jill shared that she used WebMD®, which provided evidence-based information. However, she often used Google and "assumed" that the information was of good quality but she was not certain. The information she obtained from WebMD® and Google was for informational purposes:

Jill: Go to your resources, your books, your Pyxis®. If it has to do with a procedure, we've got policies and procedures that we can go to on the computer. ...

Kim: Do you ever look things up online?

Jill: Yeah, I do. Um, WebMD® a lot. I'll Google it. Patients that are having procedures or if they have a new diagnosis, different types of medications. ... Diagnoses, diseases - if they have something out of the ordinary that we're not used to. I'll look that up. Sometimes tests - some tests that aren't very common, I'll look it up to see exactly what it's looking for and how exactly it's done. ... But I think that's the main stuff.

Kim: Where do you get your medication information?

Jill: Either out of the Pyxis®. A lot of times the pharmacist will pull stuff up for you

off their programs, whatever they have. Those are the biggest ones. Sometimes, like I said, I'll get out the WebMD®. A patient, not too long ago, that was going for an IVC filter, and I just Googled it and brought up some information that pertained to them.... ..

Kim: How do you know the information is good that you get on Google?

Jill: That's a good question. I suppose I just assume that, if it's on Google, it's been - it's what's supposed to be there; it's fact. As far as WebMD® and Google and stuff like that, I just assume that, if it's on there, it's what it's supposed to be.

Kim: Do you ever look for research articles in the course of providing care?

Jill: No. No, I don't. I don't. I supposed that would be definitely beneficial at some points, but it's not something you really think about that much.

Similarly, Betty used the computer to access information from the Internet and Intranet. She used Google and it never occurred to her to be concerned about the quality of the information. She also used a medical site a physician gave to her, but she could not recall the name. The information obtained from the Internet was used for informational purposes. Betty also accessed the Intranet, which contained evidence-based information. Betty retrieved information on medication compatibilities and incorporated this into her care:

Betty: Well now, the Internet. ...the Internet's just wonderful.

Kim: Where do you go on the Internet to find things?

Betty: Well Google is quick, and then there's the - I have one the doc gave me - Med something. I've got it. It's a website, a medical website.

Kim: What kind of things do you look up?

Betty: Well we had a patient, and I can't think of how to pronounce it, but the Mad Cow Disease - the one with the big long name. ... So we immediately went and looked up that, because that's not a very common, thank God, thing. But anything - if I'm reading an H&P and I see a word in there that I've never seen before, I'll look it up.

Kim: How do you know the information is good that you get from Google?

Betty: Oh, I never really thought about that.

Kim: What do you tend to look up on the hospital's Intranet?

Betty: We have a pharmacy icon that we go to. When I've got somebody on a lot of drips and antibiotics that I'm going to be piggybacking in, I can find out quick, compatibility. I like that. I can print that out, and everybody can just see these two get along.

Summary of computer information source. The majority of nurses in this study perceived that they used the computer to obtain information. They frequently sought information regarding unfamiliar medications, diseases, procedures, and tests. They accessed the hospital's Intranet and the Internet to obtain information, which was primarily used for informational purposes. Information that they found on the Intranet tended to be evidence-based. They also accessed the Internet and used Google to obtain information. Nurses shared that they looked for reputable sites but they were not as certain that the information found on Google was of good quality.

A difference existed between nurses from the MJH and the MH regarding the use of evidence-based care documents retrieved from the Intranet. The nurses from the MJH did not mention that they searched for policies, procedures, standards of care, or protocols when they came across something that they did not know. In contrast, nurses from the MH frequently mentioned that they retrieved these evidence-based documents when they came across something they did not know and that they used these documents to guide their practice. Conversely, nurses from both hospitals tended not to question their practice. They also did not use the computer as a means to collect evidence to support changing practice or to influence current care that they provided to patient/families.

Normative Beliefs

Normative beliefs are the "person's beliefs that specific individuals or groups of people approve or disapprove of performing the behavior; or that these social referents themselves engage or do not engage in the behavior" (Ajzen, 2005, pg. 124). Inherent in this definition is the role that the other has in influencing one's behavior. This outside influence can easily be considered a unit cultural influence. However, after considering

this, it was decided to keep normative beliefs in this chapter for two reasons. One reason is to remain true to the theory of planned behavior in that it is the *individual's* cognitive beliefs (behavioral, control, and normative), which influence their behavior. The second reason is that unit cultural influences will be presented as *basic assumptions*, true to Schein's organizational cultural framework. There is an iterative relationship between the two; but for theoretical clarity nurses' normative beliefs will be presented here with the other cognitive beliefs.

The behavior under study in this section is nurses' adoption and maintenance of EBP. Referent groups for the nurses in this study included their peers, physicians, unit leaders, and other ancillary personnel specific to each unit. Organizational charts for each unit are shown in Figures 2, 3, 4, and 5 and highlight the similarities in referent groups. All units in this study have unit educators. In addition, the MJH MS unit (Figure 2) has a Clinical Nurse Coordinator (CNC) who is responsible for monitoring processes of care and intervening to help assure optimal outcomes. The MH MS unit had a unit-based position known as the Patient Care Leader (PCL) (Figure 4).

Figure 2. MJH MS Unit Organizational Chart.

Solid line indicates direct report; Dashed line indicates indirect relationship

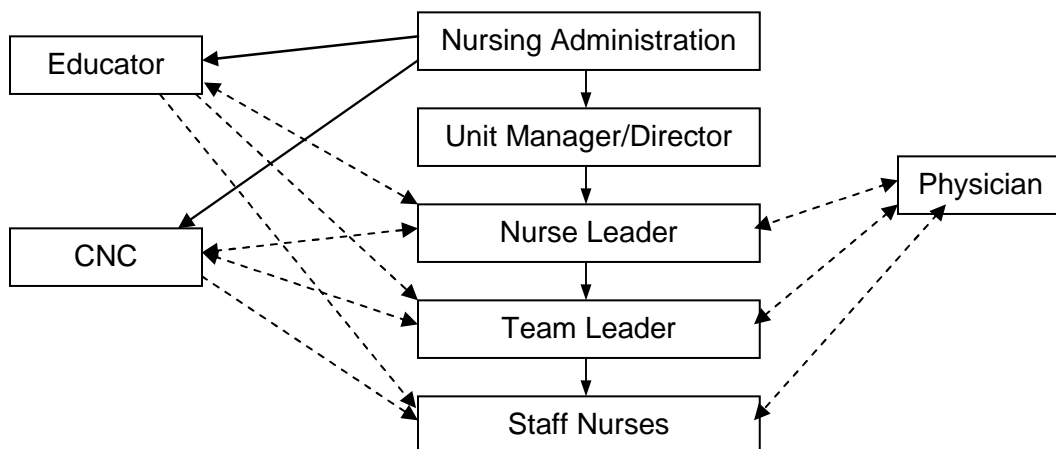


Figure 3. MJH ICU Organizational Chart.
 Solid line indicates direct report; Dashed line indicates indirect relationship

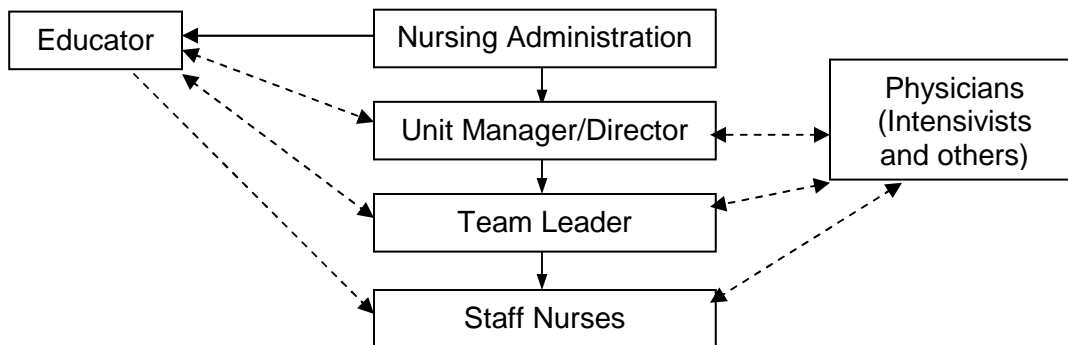


Figure 4. MH MS Unit Organizational Chart.
 Solid line indicates direct report; Dashed line indicates indirect report

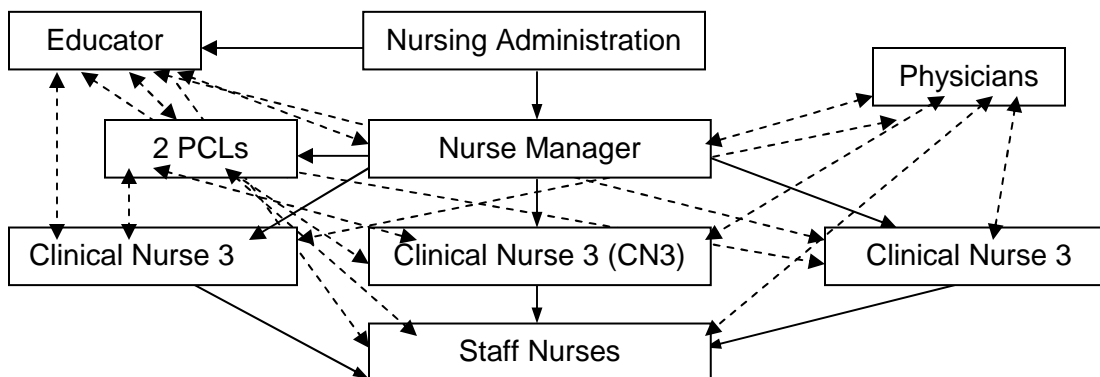
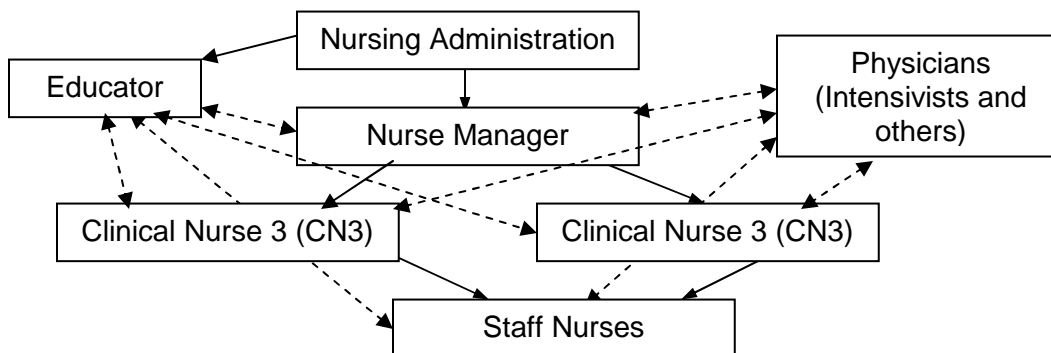


Figure 5. MH ICU Organizational Chart.
 Solid line indicates direct report; Dashed line indicates indirect relationship



Normative beliefs regarding the perceived social pressure exerted by peers to use evidence. The majority of nurses from the MJH MS unit perceived that it was not the norm for staff nurses to look to research as a source of information to change

practice. For instance, Chris could not recall a situation in which staff nurses looked for research to support a change they would like to implement. Chris perceived that other nurses in the hospital might do this but that it did not occur at the staff-nurse level:

There may be people who do that [look at research], but I don't know that staff nurses, we - I can never think of an instance where we decided we were going to look into this and we are going to decide what to do.

Similarly, John shared that he and a few of his peers read peer-reviewed evidence-based journals. However, these staff nurses did not share what they read or attempt to change practice based on findings they had discovered. Also, MJH MS unit staff nurses did not discuss research articles that they might have read. The belief that staff nurses did not discuss research deterred nurses from bringing forth suggested evidence-based changes to their practice:

I mean there are a few of us who we get Critical Care Nursing or the Journal of Nursing or something like that. And we read. But we don't really bring it in and say, hey...and talk about or anything. I do it for my own interests. And I know if it's one of those things that gets brought up later. It's like, oh I know where that is and then I have brought in the magazine. But it's not something that we just regularly talk about.

Likewise, when asked if she saw staff nurses use research to improve the unit's fall rate, Francesca shared, "I haven't personally. I know at school I had tons of books that I could actually go look in. Um, to be honest, no."

The majority of nurses from the MJH ICU also did not look to research as a source of information to change their practice. For example, Ricki perceived that nurses did not look to research articles or talk about research unless they were attending an educational seminar. Reading and incorporating research into their practice was not an expected behavior in this unit. The social pressure exerted by staff nurses in this unit to not look to research to change practice, might have deterred nurses from doing so:

Ricki: So for the most part, we don't run around doing that kind of stuff. ... But, I think, for the most part, we don't. Unless we're going to a seminar or any kind of educational thing, we don't hear it [EBP]. We don't scout it, because it's just -

what's the scenario in our circumstance in the ICU? We can't stop and say, hey, I read this. This is what's been going on. There's just too much going on.

Kim: So it's not an expected behavior?

Ricki: No. I don't think it is. I don't think it is. And I don't even know how you could implement that; because, with patients that we care for, there's no time to think. A lot of times, you're reacting. ... I think that, mostly, to me, it seems like the ones that are getting their CCRN [Critical Care Registered Nurse certification] - some of those nurses might be able to do that.... ... But, for the most part, unless you're actually actively reading that, I don't think it's something that is common for us.

Likewise, Sarah perceived that the "culture" of the unit was one in which nurses did not look up research for any reason. Sarah shared that few nurses might have looked to research, but it tended to be for their own personal knowledge and not to change practice in the unit:

I guess I must say that the culture, most people on the unit, nobody does it [look up research] - not usually. There are a couple of people that do but maybe for their own personal thing. I mean, it's not that they're not intentionally sharing it; it's just they do look it up - and there's things that I look up as well. If something does come up that nobody is really familiar with, we'll print it off; but that doesn't really happen often.

Similarly, Tracy perceived that staff nurses from the MJH ICU did not look up research. She provided a few reasons for this: nurses were in a rut, nurses had no interest in research, and nurses were not expected to be current in their practice. The normative belief that nurses did not look to research was pervasive in this unit and prevented nurses from looking to research to change or improve their practice:

Tracy: We don't really; I don't look up research or anything. ... Honestly, no, I don't think people do, honestly.

Kim: Why do you think that is?

Tracy: I don't know. Laziness? I don't know. We're just - you get into your rut and whatever. You just do your thing, and looking up research is not in my interest or others'. So, I don't like to read extra stuff or anything. I mean that's just how I am. I guess I should. But, I get nursing journals now. And, honestly, I'll maybe read a couple articles; and that's it. ... There are doctors that they research things all the time. And it's crazy, because they're so much busier than we are - professionally at least. ...

Kim: Why do you think that physicians embrace that and nursing doesn't?

Tracy: I don't know. We're almost allowed to be less scholarly. ... People expect them to be more up-to-date on everything. ... We're just not expected to. And they are.

The majority of the nurses from the MH MS unit also did not see themselves or other nurses looking up research. For instance, Pricilla personally liked to journal and she shared this intervention with cancer patients. She had asked if the unit could purchase journals for patients and her request went nowhere. However, Pricilla did not look to research to support her proposed change:

Pricilla: And one thing that I like to suggest, especially to the young moms, is how to journal. I mean you can just write some things down. There are so many things they want to say to their child, so many things that - or just how they're feeling that day. And I brought that up to CAPS [hospital-based cancer support group], but I don't think they ever did anything with it. I brought it up to see if we could start a fund, and I asked my manager too if we could. There are certain stipulations, because you can't do like I was thinking we could, like buy candy bars that we could sell and donate the money to get journals. But I think that's a wonderful tool.

Kim: Have you ever looked up research on journaling in cancer patients?

Pricilla: Uh-uh, I have not.

Pursuing this further, Pricilla, when asked if nurses looked to research to help justify changes, perceived that staff nurses did not do this. Looking to research to support changes in practice was not the perceived norm in the MH MS Unit:

No, [nurses do not look to research]; because, every time I've brought something that I've heard or read, no one knows anything about it. There are - so-and-so I know, she goes to the ONS [Oncology Nurses Society] meetings and she does pick up information. ... It's not the norm for nurses to look at research.

Barb concurred that staff nurses did not tend to look for research in the unit: "We don't see too much about research - honestly, don't. I mean we do the journal thing [Journal Club], where we do some research; but at this level I - we don't see too much."

In contrast to the other nurses from the MH MS unit, Paige did look to research to support making practice changes. For instance, Paige presented a research article at

the MH MS journal club, which compared the falls rate of patients receiving chemotherapy with those who did not receive chemotherapy. Paige and the Nurse Manager were hoping to use this research to support a request to increase nurse staffing:

I go to seminars.... I read. We have a journal club, so I presented a research article about falls in hospitalized patients getting chemo. And the research article was a collection of research that the author had done, and there was no reason to back up the fact that patients that were getting chemo were any more prone to falls than anybody else. So, our manager - we were ready to change something, like extra staffing or you know - the research article wouldn't support that.

In addition, Paige perceived that the hospital made practice changes based on research. This occurred through their shared governance structure, specifically within the Nursing Research Outcome Council (NROC), which consisted of staff nurses. This council was the best-kept secret because Paige was the only nurse from this unit who mentioned it or was aware of its existence when asked:

Paige: I know the nursing NROC, the Nursing Research Outcome Council. I used to be on that. And they would have a concern - I guess that someone brought to them and they would do a lot of research on with journals and articles and their own data collecting. One was frequent vital signs - I remember because I was on part of that. Frequent vital signs after a procedure, like radiology and so on. And they changed; I don't know exactly, but they changed some of that by doing a lot of data collecting and research.

Kim: Explain that council to me, because you are one of the first people that have mentioned it. I have heard about it from people in the ICU; but, on your floor, there is not a lot of awareness of this committee.

Paige: There is a representative from each unit that goes to it. It is hospital-wide. ... But, like I said, they will take a concern and then they'll look into it. ... Because somebody will raise an issue, and then you'll have to look up the research articles and do the data collecting and find out can it support something that we do here? Or, can we change something here?

Nevertheless, Paige perceived that she was not the "norm" and that the other nurses did not look to research to change practice: "I do; but, like I say, I am not the norm - no, because nobody else does it; nobody else looks in the journal articles."

Similar to the other units, the majority of nurses from the MH ICU did not look to nursing research as a source of information to change nursing practice. However, a few nurses did question what they did but they did not take it to the next step by looking to research to see if there were other options. For example, Angela voiced a concern with open visiting hours and the constant interruptions that occurred when the family was present. When asked if she researched this, she stated:

No, I haven't, no I haven't. I don't know if there is a study on it. I don't know how they do it; but the nurses and I just say, let's just count the number of times we are interrupted, just in an hour from here to there.

Similarly, Jill perceived that her peers in the unit did not look to research when they were providing care. Jill perceived that nursing research could be beneficial, but it was "low on the priority list" for staff nurses. However, Jill perceived that physicians were the drivers of the use of evidence and nurses followed what they ordered. The normative belief that staff nurses did not look for evidence to change practice prevented Jill from looking to evidence as a source of information:

Jill: No. No, I don't. I don't. I suppose that would definitely be beneficial at some points, but it's not something you really think about that much.

Kim: Do you think nurses in your unit look up research?

Jill: No, no. I think that would just be one of the things that are pretty low on the priority list, as far as it directly affecting patient care. So it's just not something that we - the first thing that we would go to.

Kim: Why do you think that is?

Jill: I think that's more physician-related. Research articles. I think a lot of them are just sort of for the best care for the patient; and physicians are in charge of that, ultimately. They kind of, you know, it gets filtered down. They read the articles, see what best practice is; they institute it. We follow through. So I certainly think it would be beneficial to us, but I don't know.

Likewise, Claire perceived that the norm in the unit was for staff nurses not to obtain nursing research to support changes in practice. Claire also perceived that she was

unfamiliar with how to find nursing research in her unit and that nursing research could be an “excellent” resource:

Claire: No, I don’t look to research; and you know what? I am not familiar enough with where to find the resources for nursing research, but I think that would probably be an excellent resource.

Kim: Do you see other nurses in your unit look to nursing research for answers?

Claire: No.

In addition, Betty perceived that her peers did not talk about nursing research but that nurses, other than staff nurses, did use nursing research. When asked if she or other nurses looked to research, Betty stated: “Not myself. I don’t really ever hear anybody talking about that. ... No, not at my level of nursing.”

However, certain MH ICU nurses exerted some pressure on their peers to look at nursing research to change practice and they did this via the Journal Club. The MH MS unit also had a Journal Club but it was led by the Patient Care Leaders (PCLs) and not staff nurses and in light of this, it will be discussed under other referent groups later in the chapter. The Journal Club in the MH ICU was led by staff nurses and was recently re-started after lapsing for an undetermined amount of time. Claire perceived that the purpose of the Journal Club was to read and discuss nursing research and how it related to their practice:

I have read a couple of the articles, and what they generally do will pick an article and then discuss it - and off hand, I can’t remember what the articles were that they actually were discussing. I have read two of the articles. One was on the benefit of chlora-prep baths in the intensive care unit to decrease MRSA.

Likewise, Jill perceived that the purpose of the Journal Club was for staff nurses to discuss nursing research. Jill went further than Claire and perceived that the intended outcome of the Journal Club was to change practice based on research findings to benefit the patient/family:

I know that they recently started a journal club on our unit. And they get together once every two or three months, and that’s pretty new. And they take a research

article and kind of dissect it and how does it pertain to our unit and what can we get out of it and what can we get from it and how can we incorporate into our practice to benefit the patient and stuff like that. So, obviously, that's great.

Betty shared that the Journal Club had been intermittent over the past few years but recently the Journal Club started to regularly meet again to discuss nursing research.

The presence of the Journal Club increased nurses' awareness of nursing research because they are talking about the Journal Club in the unit:

Mm, it's been on and off for - yeah. It's more consistent now. They tried it a couple of years ago. I think they had a few meetings, and it kind of fell out; and now it seems like I'm hearing people are going to the Journal Club - and I would say this might be five or six times that they've met, but I don't go to it.

Summary of normative beliefs about the perceived pressure from peers to use evidence. The majority of nurses from all units perceived that their peer group did not use nursing research to change practice. The normative belief that this significant referent group did not engage in retrieving nursing research prevented individual nurses from doing so. Specifically, the nurses from the MJH perceived that looking to nursing research was not the "norm" or not in the "culture." The lack of incorporating research into practice was further substantiated by the MJH nurses' perception that they did not look to evidence-based care documents, such as standards of care, policies, or procedures, when they came across something unfamiliar.

In contrast, even though the nurses from the MH perceived that staff nurses did not look to nursing research to change practice, there was some referent group pressure to do so. For instance, as previously mentioned, nurses from the MH perceived that they did look to evidence-based care documents when they came across something that was unfamiliar. Additionally, a MH MS unit nurse attempted to change the staffing level based on research findings. This same nurse also was a Nursing Research Outcomes Council member. This hospital-based council did change nursing practice based on research and hospital-based data. However, there was a lack of awareness of the work

of this council in both units. The MH ICU was also experiencing the beginnings of social pressure being exerted by the Journal Club that discussed nursing research and its implication for their practice.

Normative beliefs regarding the perceived social pressure exerted by physicians to use evidence. The majority of nurses from the MJH MS unit perceived that physicians did not mention that they used evidence in their practice. However, two nurses mentioned that some physicians talked about evidence when they made clinical decisions, and one nurse perceived that physicians did not talk about using evidence when making decisions. For instance, John shared that sometimes he would hear physicians talking about using evidence in practice: "Occasionally, yes, I hear it from clinicians. The doctors will actually, some of them will really, you know, up with it to say, this is evidence." Additionally, Cindy shared a story in which she cared for an obstetric patient who developed HELLP Syndrome. In order to gain more information about this syndrome, she called the Women's Center to talk with nurses and physicians who specialized in obstetrics. Cindy perceived that physicians talked about what "research showed" and that nurses talked about their "experience" with caring for a patient with HELLP Syndrome:

Well, at least the physicians that I was talking to - they were - it was a lot of them kept using the evidence-based practice word - research shows and evidence-based practice this and research this. The Women's Center, not so much; they were just, well you know, based on my experience and such and such.

In contrast to John and Cindy, Michelle, when asked if she heard physicians talking about evidence when deciding what to do for a patient, shared, "No, not so much. I mean, not that I have seen them say that."

The majority of nurses from the MJH ICU perceived that physicians were an influential referent group regarding their use of evidence. The physicians, in this unit, had either a positive or negative influence on the nurses' ability to use evidence in

practice. For example, Fred perceived that the use of evidence in practice depended on who the physician was. Fred perceived that some physicians were open to new ideas and ways of doing things and some were resistant to changing their practice, even if there was research to support a change. Also, Fred perceived that physicians were the drivers of using evidence in practice in the ICU; they wrote the orders that nurses followed:

Well, I think that is also dependant on the doctor to a certain degree too, whether this new evidence or data is shown to be effective. If someone has been doing it a certain way their whole career and it has worked for them, they may not change. Now, if the new data is persuasive enough to them to say, hey, this may work better or different and they are apt to change - they are not old-school mentality - they will probably use that more frequently. It just depends on the physician. ... Overall, I think physicians mostly affect medications, procedures; things like that as far as evidence goes.

Similarly, Bob perceived that physicians decided which evidence-based protocols would be developed in the unit. He shared that an Intensivist read multiple research articles on inducing hypothermia and then he was integral in establishing the Hypothermia Protocol they currently used. Also, Bob perceived that physicians used evidence in their practice and that nurses followed the orders and/or protocols that physicians helped to develop:

I know that one Intensivist was heavily involved in the development of the Hypothermia Protocol and had read multiple journals, articles. And they were involved with the - and then developed based on evidence-based practice. ... Physicians, I think, they do try to use the best practice there.

Likewise, Tom shared several stories in which he perceived that physicians either facilitated or prevented his use of evidence in practice. One story in particular provided evidence of physicians who facilitated and impeded Tom's use of evidence in practice. He perceived that two physicians disagreed on how to treat a patient and he recalled reading a research article that suggested a specific treatment option. When Tom made the suggested intervention, one physician "bashed it," and the other said, "Let us try it." The intervention was implemented after the second physician verified that research supported this option:

Tom: Actually, interestingly, we had a pancreatitis patient; and there was a big argument about whether to start feeding them early or not. Actually, the reason why I really accessed it was because I just recently saw that in a critical care article. And it goes on about using post pyloric tubes and small amounts of feeding rather than starting them on regular diets or something like that. But it actually found that patients improved, or did better, if they were started on some low dose feeding continuously. One doctor just completely bashed it, and our Intensivist was just like – “let’s try it; let’s put a small bore tube in.” I remember him looking on some UpToDate® stuff, and we started it. Actually, looking at the research there was a lot that pointed out to using low dose. ... Using a low dose, with a small bore feeding tube, actually, improved a lot of their outcomes - less were intubated, less needed to be on pressers; a lot of outcomes showed, I think, the hospital stay was shorter; there was some interesting stuff there.

Kim: It sounds like you had some resistance from a physician to do this?

Tom: Actually, it was the GI doctor, who was particularly resistant to it - and the Intensivist - sometimes I’ve noticed, and it all depends. Sometimes the Intensivists are in an older school of thought, and some just kind of are off the cuff. For instance, there is one doctor who is all about research. I watch this man quote everything from research. ... Sometimes...they shoot it all down. ... But, I think it’s just a step that doesn’t seem to be very effective, even when you present it to doctors.

Nurses from the MH MS unit, for the most part, perceived that physicians facilitated their use of evidence. For example, Mona perceived that one of the Hospitalists was instrumental in bringing the improvement project known as BOOST (Better Outcomes for Older adults through Safe Transitions) to their unit. This evidence-based project was a national initiative started by the Society of Hospital Medicine, which used a patient/family teaching method known as “teach back” to help ensure that patient/families understood medications and treatments:

Mona: They conducted that study that a lot of patients get discharged; they come back within a few days. And most of them, when they talked to the patient, they said that they weren’t educated properly upon discharge. ... So they said we have to do something better. We focus on doing teach back, it’s called. ... We ask them after to make sure they understand. ... And teach back is a method not only used during discharge, but we also do it for any new medications - because there’s a study that says that a lot of patients get new medications while they’re in the hospital, and they got no idea what it is. And most of them actually go home with those new meds. So, now we have to encourage and make sure we explain them to the patient and we use teach backs. So that we know that, it’s like a confirmation that the patient understands what these medications are. ...

Kim: How did this come about?

Mona: I don't know how our unit was picked. ... And I guess it's been something that's been discussed around - you know, nation. And they said that they have to do a pilot and they picked our unit. ... Actually, it's Doctor Blank. He's a Hospitalist and he's the one that's kind of in charge of BOOST.

Similarly, when asked if physicians looked to research when making care decisions, Debbie shared that, "sometimes they do but they also talk between each other; yeah, some do." Likewise, Cathy perceived that physicians talked about incorporating research into their decisions: "I guess sometimes. Typically, I guess, it's just the way that they word it; but sometimes you hear it." Cathy also perceived that physicians shared their evidence-based knowledge regarding such things as pain management and that this facilitated nurses using evidence in their practice:

Sometimes I think our unit sees a lot more of pain management. Our palliative care doctor had given us a seminar, just on our floor. And just kind of explained to us how drugs work. Because sometimes you have a patient that's under-sensitive and they tell you that, if they're rapidly breathing or grimacing, that they're probably in pain - so medicate them. It's one of the evidence-based practices that we use a lot.

The majority of nurses from the MH ICU perceived that physicians facilitated their use of evidence in practice. For example, Yolanda perceived that a certain physician was responsible for the development of evidence-based care documents, such as protocols and the rounds checklist. She perceived that he worked closely with the Nurse Manager to institute and revise these documents. Yolanda perceived that this physician constantly read research and was the main driver behind evidence-based changes in the ICU. Physicians drove the use of evidence by establishing evidence-based protocols, orders, and checklists, which nurses then instituted and followed:

Yolanda: It has to be with this particular doctor that is the one who - I don't know if he's the Medical Director of the ICU. ... I think it's always been there, the actual flow sheet [sic rounds checklist]. And they just kind of revised it over the years and things like that. But I do believe it was him that actually - he's the one that's also very responsible for all of the protocols that we have in there and very involved with our Nurse Manager with all the protocols that we have in this ICU. I'm not sure actually how it got started. But it truly covers everything. It's a great goal. It's an amazing tool.

Kim: Do you know how your protocols are developed?

Yolanda: How they came about? I don't. ... But now he's more of a researcher. He's constantly researching, constantly reading. ... So, I just can't imagine that he's not one of the big ones that investigates new research. He finds out what other people are doing. ... But he's big in trying out what they're using and their tools and the procalcitonin levels, which some people don't even know about. ... But I know he's a big facilitator with a lot of changes that happened. Absolutely. Absolutely.

Moreover, Greta concurred with Yolanda that the Medical Director played an integral role in ensuring that care was based on evidence. This was accomplished through the creation of evidence-based checklists, protocols, and orders, which nurses followed:

Oh, actually we've probably been doing the rounds I would say about six or five years now. And, actually, when we first started it, we didn't have that [rounds checklist]. And Doctor Blank is the Medical Director for the ICU, I mean for all the Critical Care, and he's very good about all this evidence base - and he actually come out with this form himself. ... We do all the evidence-base testimony thing. We are all up-to-date - that's the main thing. I mean we might not be as big as the New York Hospital; but, when I go to AACN [American Association of Critical Care Nurses] and they ask all this, "Who's doing this? Who's doing that?" We're doing all of that. So, that's really neat. And, of course, Doctor Blank is a part of it. He's the Medical Director. I love that.

Greta also perceived that physicians who kept current with evidence-based medicine, made it much easier for her to use evidence in her practice:

What make it easy? If the doctors know what they are doing and they know about all this evidence base, that really helps. Because they know why are we doing this, why are we checking it, and why are we checking a certain lab, why do we need to give the certain drugs. ... That kind of helps if they know - well this is standard of care for evidence base for a patient with an MI; we are supposed to be doing all this - one, two, three - so that kind of helps.

Likewise, Ethel perceived that the Medical Director played an integral role in ensuring that the care provided was based on evidence. Ethel shared that, when she attended a national conference, she was one of the rare nurses who validated that she implemented most of the mentioned evidence-based practices:

Ethel: We use evidence-based practice I think; we're all at the standards in medicine - were all at the top with them. So, our Medical Director really seeks out the cutting edge with medicine and he keeps us, I think, on the cusp of what's-up-and coming.

Kim: How does he do that?

Ethel: I don't know. ... He must go to a lot of different seminars and research. But he really and truly - I'm impressed with him. I went to the National Training [sic Teaching] Institute for Critical Care Nurses. It's a convention they have every year. And, just going to the different classes, they would say, all right, well, who's doing this kind of evidence-based practice? And, I mean, we were asked to raise our hands; and I'm kind of few and far between saying, yeah, we do that. Yeah, we do that. And oh, wow, we really keep up. Wow. The Medical Director's really keeping us on top of things here.

Summary of normative beliefs regarding the perceived social pressure

exerted by physicians to use evidence. Physicians, as a referent group, exerted a powerful influence, which either facilitated or hindered nurses' use of evidence in practice. When physicians guided the selection of evidence to use in practice, nurses in this study tended to follow medical research findings rather than those from nursing research. However, the dependent role of nursing is vital in ensuring that medical research is implemented. A majority of nurses from the MJH MS unit perceived that physicians did not mention that they incorporated evidence when making clinical decisions. This group of nurses, as previously mentioned, was also less apt to turn to evidence-based care options in their practice. Furthermore, the majority of nurses from the MJH ICU perceived that physicians could either facilitate or hinder the use of evidence-based care interventions. Physicians who were open to new ideas and changing practice tended to embrace the use of evidence in practice and, therefore, facilitated the nurses' use of evidence. The influence of physicians was more apparent in the MH. Physicians in key leadership roles in both units facilitated nurses' use of evidence. This was evident in the MH MS unit's BOOST improvement project and the evidence-based care documents that guided care in the MH ICU.

Normative beliefs regarding the perceived social pressure exerted by nursing management to use evidence. The perceived role that nursing management had in influencing nurses' use of evidence varied by unit. The majority of nurses from the

MJH MS unit did not mention that nursing management played a role in their ability to use evidence in practice. However, two nurses from this unit perceived that nursing management facilitated their use of evidence. For example, Chris perceived that nursing management did incorporate nursing research into new forms or new ways of doing things:

My guess is it would have come from somewhere in management and there would have been some people who did that. And then, as a result of that, then either we would get a new form that explains it or we're just notified of this is how this is going to be done now.

Likewise, John perceived that the "white lab coat wearers" facilitated the use of evidence in nursing practice. He perceived that when the unit encountered a problem, the Educator or Clinical Nurse Coordinator developed a plan. The plan included staff education, which was based on evidence:

So, I see it [evidence] come from more of the, I guess you could say the lab coat wearers, the white lab coat people. ... The use of evidence normally comes up when there's a problem. So, something's not right. Then it's addressed. That's when you hear evidence-based practice a lot. Like, okay it's not. Why is it not? And then, when you have to go through the education, training, and stuff like that, it kind of lets you know that we're not just teaching you this way because we want to; we're teaching you this way because this is the most effective and right. So yeah, I would say that it's more of a trickle down to us. We're taught it.

Similar to the nurses from the MJH MS unit, the majority of nurses from the MJH ICU did not perceive that nursing management played a role in their use of evidence. The exception was Fred. He perceived that nursing management made changes in practice based on evidence, even though nursing management did not mention that the change was based on evidence:

It is talked about a lot through upper management and Team Leaders. I don't think the words are said, but I think more the data and the changes themselves are talked about more so than this is evidence-based practice. More like this is what we are going to be doing. We are doing this, because it is proven to work. They may not use those words, but it is used throughout.

Additionally, the majority of nurses from the MH MS unit perceived that nursing management did not influence their use of evidence. However, two nurses from this unit

perceived that nursing management facilitated their use of evidence. For instance, Pricilla, when asked what would help nurses use evidence, shared that “that’s where management comes in. ... It depends who’s involved. It depends on who’s educated. ... So big management has a key role; they need to facilitate it and to communicate it.” Likewise, Cathy perceived that the Nurse Manager or Educator looked to nursing research for evidence-based fall-prevention interventions: “It’s like the - I don’t know if our Nurse Manager is doing that or if the Educator is. I’m sure they are.”

In contrast to the other three units, half of the nurses from the MH ICU perceived that nursing management played a role in facilitating their use of evidence. For instance, Betty perceived that the Nurse Manager played a vital role in informing nurses about evidence-based practices. She also perceived that the Nurse Manager was essential in ensuring that nurses changed their practice to adhere to new evidence:

I think that kind of stuff [research] would come from our Unit Manager again. She would bring it to us. And our Unit Manager brings things like that to us, like the lavage thing you were just talking about. We used to use a lot of that and now we’re getting away from that quite a bit.

Likewise, Claire perceived that nursing management played a vital role in facilitating the use of evidence by making it readily available, providing the necessary resources and supplies, and offering encouragement:

I think that nursing management also is looking at these particular types of things [evidence-based practices] and readily able to incorporate it into whatever it might be. Also, giving us encouragement and the tools necessary to complete these things.

Similarly, as previously mentioned, Jill perceived that the Journal Club facilitated the review of nursing research and its implication for practice. Jill perceived that the Nurse Manager supported and facilitated the Journal Club: “I know our manager was one of the big facilitators of it.” Also, Greta perceived that the Unit Manager worked closely with the Medical Director to revise evidence-based care documents, such as the rounds

checklist, orders, and protocols. Greta also perceived that the Nurse Manager frequently mentioned evidence-based practice:

He [Medical Director] does with our Unit Manager. Actually, if he's got some other things that he wants, I go over there or delete over there - and our Unit Manager helps him. So, our Unit Manager will kind of help him do the changes and give it to him. ... The Unit Manager is always talking about evidence base.

Summary of normative belief regarding the perceived social pressure

exerted by nursing management to use evidence. The perceived role that nursing management had in influencing nurses' use of evidence varied by unit. The majority of nurses from both units in the MJH and the MH MS unit did not perceive that nursing management influenced their use of evidence. On the contrary, nurses from the MH ICU perceived that their Unit Manager, in particular, played a vital and essential role to their ability to use evidence in practice. She did this by communicating changes, providing feedback, assisting in making evidence-based care documents readily available, ensuring that nurses had adequate resources and supplies, and offering encouragement.

Normative beliefs regarding the perceived social pressure exerted by other people to use evidence. As previously mentioned, the MJH MS unit had two nurses who interfaced with staff nurses to improve care. One nurse was the hospital-based Educator, and the other was the unit-based Clinical Nurse Coordinator (CNC). The majority of nurses did not mention the Educator when they talked about improving care or using evidence in practice. The CNC had an integral role in monitoring various unit outcomes. The CNC would develop improvement plans when deficits were identified in conjunction with unit management. However, a majority of nurses from the MJH MS unit perceived that the CNC did not influence their use of evidence. For instance, Jennifer perceived that the CNC role was not beneficial, even though the CNC implemented

improvement plans to improve unit-based nursing-sensitive indicators, such as the fall rate. Jennifer did not state if these improvement plans were evidence-based:

Ah, this was something new, experimental; and then they wanted to introduce it to every floor. ... I realized that it [CNC] was something to me - as a floor nurse – useless. ... They always say it's outcome-driven; so, if you have high fall rate on your floor, they are supposed to come up with an action plan and reduce it and make sure patients don't fall. ... They also monitor the nurses, their documentation.

Similarly, Michelle perceived that the CNC monitored outcomes and developed improvement plans when there were deficits. Michelle, like Jennifer, did not state whether or not the CNC's plans were evidence-based:

Well, I can tell you what it used to be. What it used to be was, or what, I guess, it should be - I'm not really sure - is making sure that we're complying with JCAHO in our charting and if the state licensing and regulatory body comes in for a visit, they facilitate that. And then they make sure that we have goals and stuff to better ourselves, as far as charting and patient care is concerned. ... And, for example, if we have five falls in a month, they have to come up with an action plan and then follow through with the action plan and make sure we are doing whatever we are supposed to be doing so that our patients don't fall. ... And then they deal with core measures. ... I do see her come up and check our charts. I know she has talked to us about pain assessment and how we are supposed to chart it. ... So, I don't know if they just deal with stuff that we are doing wrong and, then, they fix it.

Likewise, Francesca perceived that the CNC monitored unit outcomes and nurses' documentation. The CNC developed improvement plans, which the nurses had to read but she, like the others, did not state whether or not the plans were based on evidence:

She [CNC] checks over our charting; she checks if the core measures, I think, are being done - stuff like that. She goes through the charts. Yeah, that's about it. I don't really talk to her. I mean I see her all the time, but I don't - we don't ever, you know, she, just if something is wrong, then she'll kind of have a paper and say, I want you guys to read this and sign off that you read this that this is missing. ... I know she works with our Nurse Leader closely about stuff. I don't know all what she does; I really don't. I just know she checks through the charts, checks through our charting and makes sure that we are charting what we're supposed to be doing, especially core measures, coronary heart failures, MIs, pneumonia, stuff like that.

In contrast, John was the only nurse from the MJH MS unit who perceived that the Educator and the CNC influenced nurses' use of evidence in practice. John

perceived that, when the CNC determined that a knowledge deficit negatively influenced an outcome, she worked with the Educator to develop an education plan, which incorporated current evidence. John perceived that the CNC and the Educator consistently strived to ensure that nursing practice on the unit was based on evidence.

They accomplished this via evidence-based improvement plans:

If it's education, well then, we need education. And then we get the Educator involved, if need be - is it something that you just don't know? ... The Educator, the CNC, they're really into making sure that what we're doing, especially again when it comes back to if there's a problem, how do we address it? If it were an education of course, they'd want to educate using evidence-based practice. And it's one of those things where it comes back to this is how it should be done and this is why.

The MJH ICU did not have a CNC assigned to the unit, but a hospital-based Educator was assigned to the unit. The majority of nurses did not mention the Educator when they talked about what would help them use evidence in their practice or how improvement plans were conducted. However, out of the nurses who did mention the Educator, two nurses perceived that the Educator facilitated their use of evidence, and two perceived that the Educator hindered their use of evidence. For example, Bob perceived that nurses in the unit followed the best evidence and that the Educator facilitated this. The use of evidence was facilitated through the critical care orientation course (provided by the Educator) that nurses attended when they entered the unit:

Bob: I think the nurses will go by the best evidence, also.

Kim: Do you have examples of that?

Bob: They also offer, when nurses start in the unit, they go through the critical, the ECHO course, which is offered by the American Association of Critical Care Nurses. And I can't remember what ECHO stands for, but it's the Critical Care - the introduction to - course, which is taught by education nurses there, who come in with articles and discuss things, so that they're always, those nurses that are teaching, they're looking things up and then teaching the nurses that are in the units and stuff.

Similarly, Ricki perceived that the Educator was the “only” nurse who spoke of evidence. Ricki perceived that, when nurses asked the Educator questions, she consistently responded with an evidence-based answer:

Kim: Do you ever hear nursing say, “The evidence shows we should do it this way”?

Ricki: Only in Sharon. ... She’s the one education person we have in the hospital. She orchestrates all the education, such as the ECHO class, which is the critical care class. So, if you ask her something, her perspective will be based on evidence-based things. And, it could be something like restraints, even regarding restraints. So, between that and any other aspect, if I were to go to her and I were going to ask her something, what’s the latest on this? That’s how she’d start, probably, the conversation; because she keeps up on that.

Conversely, two nurses from the MJH ICU perceived that the Educator did not influence their use of evidence. For instance, Wilma perceived that the Educator was unavailable and did not interact with staff:

The Educator – and, when I went there, I met her once and then I met her again once in six months. And everybody would tell me that because I would go to work, and she just sits in her office and hides. ... That’s her job to be in there, and the physicians hate it. They’re like, “Are you kidding me? Her door is closed all the time. She’s in some meeting or the other.” She is totally missing in action.

Likewise, Sarah perceived that education was lacking on the unit. From Sarah’s perspective part of the problem was that the Educator had “a lot on her plate” and did not make herself available to the unit. Sarah perceived that the Educator was out of touch with the current patient population and was unable to adequately answer clinical questions that nurses were asking:

Sarah: I just feel, specifically in our hospital, that education for the unit is lacking, as far as like what the new practices are. There are a lot of times where we have something that comes up on the unit that we don’t have very often. And I think that probably goes for a lot. You don’t see it very often, so nobody kind of knows how. So, to have an inservice every once in a while on these specific topics would be good. ... But I just think overall just education and kind of evidence-based practice and that sort of thing would be good.

Kim: How would you see that working?

Sarah: Well, I think to have an education specialist to be specific for the unit and the telemetry units on a daily basis. That specific person to take patients to

understand kind of what the latest is and what the latest type of patient is. I mean, I think things change. And, when you are not having the hands-on in the units, then you have an education person that doesn't really know what's going on; and they're not there day-to-day to know what's going on. When something comes up and you ask them and they really aren't sure either, I mean, I can pull something out of a book and read it too if that's what they're going to do. I can do the same thing. I think just to have somebody there that's not pulled in 20 different directions, educating all, what seems to be the whole hospital, somebody specific to the unit.

Kim: Do you have somebody like that now?

Sarah: We do have an education specialist, but that person does our ECHO course. They are teaching the critical care course; they are teaching the new nurses that come in. So, she has a lot on her plate. I think the biggest thing, every once in a while, is having that hands-on contact with a patient.

Sarah also perceived that the lack of education from a designated Educator hindered her use of evidence. Sarah perceived that a vital role for the Educator would be to retrieve evidence and make it readily available for the nurses to "read":

An education specialist would help me use evidence. ... I think just being able to pull information. I mean, stuff is printed; you read through it and sign off on a fly by education or something like that. But I think to have somebody routinely there that has the time; like I said, it's nice for them to take patients occasionally but to spend most of their time being able to look up the evidence-based practice. To be able to print that information off and allow us to read it when we have a question about something, allow them to go and sort of do the research. Ultimately, we rarely have enough time in the day to do what we have to do as it is; so, that's what happens.

In contrast to the nurses from the MJH, the majority of nurses from the MH MS unit perceived that their Patient Care Leaders (PCL) and their Educator influenced their ability to use evidence in practice. The two PCLs reported to the Unit Manager, and the Educator reported to a central Education Department. Nurses perceived various ways that the PCLs and Educator facilitated their use of evidence. One way the nurses perceived that the PCLs facilitated their use of evidence was through the Journal Club. The PCLs led the Journal Club, which met monthly, and this was where nursing research articles were discussed to see if it made sense to change practice based on

the research findings. For instance, Barb perceived that the PCLs, through the Journal Club, facilitated nurses discussing research:

They have Journal Club, where they bring an article once-a-month. Actually, the Patient Care Leaders are leading that. And they pick an article, or someone on the staff - they ask somebody to please pick an article and they have a Lunch-and-Learn. So, yeah, we do pull up other ideas and sit with them and talk about it and see whether it filters in or not.

Likewise, Marcy perceived that the Journal Club was “good,” because nurses gathered to discuss nursing research and its implication for their practice:

Well we had a PCL who was very involved in the Journal Club. ... It's good; you look at things, you look at articles, and read them over, and answer questions.... ... That's why some of them are really good, some of them you do learn something, oh yeah, okay.

Similarly, Cathy perceived that the Journal Club facilitated the review of nursing research. During these discussions, nurses learned if something in their practice was supposed to be changed based on the findings:

Cathy: And they'll review an article. You know, you read it. It's something that maybe they've found in the Nursing or Medical Journals or something that would affect us. I guess journals are always good, because there is always stuff that is always changing that you learn about. ... It's supposed to be more related to what we typically see in our unit. ... So, they've asked us if we have any article that we've found.

Kim: So it's up to the nurse to find articles?

Cathy: Well, it can be us but it's usually the Patient Care Leaders most of the time. If nobody's brought anything to them, then they'll do it.

Besides leading the Journal Club, nurses perceived that the PCLs facilitated their use of evidence in various other ways. For example, as previously mentioned, one of the PCLs gathered and presented research on the benefits of Hourly Rounds; and, as a result, Hourly Rounds were instituted in the hospital. Another example of when PCLs facilitated the use of evidence was Barb's perception that they helped nurses explain things to the patient/family. They also monitored certain evidence-based outcomes to help ensure compliance:

Barb: The Patient Care Leaders make it easier for us. That program has really helped, because I don't have time to sit and take care of those things. And they're more educated and they, hopefully, have the time because their role is sort of not clinically-defined. They're still finding a way. But they have the time to sit down and explain more of that than we do. And that really helps a lot. We have two of them. ...

Kim: What else helps?

Barb: ... And then the Patient Care Leaders, too, they direct those certain projects. They're responsible for making sure the pneumonia vaccine is given to every single patient, and who meets the criteria; and there's a sheet on every chart and they police that every day to make sure we're at 100 percent.

Another way in which PCLs facilitated the use of evidence, as perceived by Marcy, was through the development of a checklist for chemotherapy patients. The checklist concept was widely recognized as a way to ensure that certain evidence-based process-markers were completed. This was completed to reduce errors and to help ensure a good outcome for the patient. The checklist for patients receiving chemotherapy helped ensure that certain evidence-based interventions, such as education and follow-up care, occurred:

Marcy: We've just started using a checklist with chemotherapy patients as well. The PCLs just made those.

Kim: What kinds of things are on the checklist?

Marcy: Basically, does this person qualify for a follow-up phone call? Was this person given information about their chemotherapy? Who did it? We have to sign off. I can't remember everything that's on there, but I think it's mostly, were these given? Was the patient educated about chemotherapy? When was chemotherapy given? Does this patient qualify for a follow-up phone call to check on things? And that kind of thing. But I can't really remember everything. It's new; we just started doing it. But I think it's good because I think we should. We're an oncology floor, and we should do it.

The Educator assigned to the MH MS unit was perceived by the nurses to facilitate their use of evidence. For instance, the Educator, as previously mentioned, was involved in retrieving research to substantiate the need for changing the way chemotherapy was handled. In addition, the Educator was perceived to be instrumental in incorporating evidence into the fall-prevention program:

I think our educator looks to research. I know she's done a lot in this fall risk. She's the head of this. She's my resource for that team map. And she's looked into many different things, I think on the Internet, books, and research, and just still trying to find what's going to work best on our floor. (Debbie)

Similarly, Barb perceived that the Educator kept nurses up-to-date on chemotherapy by providing them with evidence-based information:

There's been a lot on chemo recently that our Educator has been bringing to us, because we really weren't thrilled and comfortable with our chemo knowledge. We don't do tons of it. We don't do bone marrow. So, what do you have - two, three chemo patients a week? So, if you tell me what chemo drugs you're going to get and what regimen, I have to look up everything. I don't do it enough. I'm not comfortable. Pretty much, everybody else is the same way.

Likewise, Cathy perceived that the Educator played a vital role in keeping nurses current on required annual education:

Yeah, because she's [Educator] actually really good. And then she makes sure we're up to date with your CPR is expiring; she'll let you know if you need your CE's for the year or for your license - and then the education that you have to have, hospital-required. She's always letting us know all that stuff. Actually, this is the nicest hospital I've ever, I think, worked for with regards to they keep you up-to-date with everything that you need to do. ... They're more involved in keeping you up-to-date so that you can care better for your patients, which is helpful for everybody.

The MH ICU did not have PCLs as part of their staff but they did have an assigned Educator. Half of the nurses interviewed from this unit perceived that the Educator facilitated their use of evidence. For example, Ethel perceived that the Educator educated nurses during orientation and also kept the nurses abreast of evidence-based practice changes: "And she participates in orientation in our, CCIP program, which is our Critical Care Intern Program. ... And then updates us on the latest things so we know." Likewise, Greta shared that "even the Educator talks about - 'This is evidence base.' It's a part of her education; this is evidence base. That's the reason we have to do this. And this is evidence base; this is why we are doing this form."

Similarly, Jill perceived that the Educator was available and helped keep nurses current by educating them:

So we do, and she's pretty available, not all the time, but she's pretty available. She's pretty easy to reach and stuff. There are a lot of educational opportunities. And again, it's something that, if you want it, it's there, which is nice. Some people aren't interested, and they just want to come in and do their job and go home. But I think, working in the critical care unit, mostly people have a lot more drive; they seek out those opportunities and they're definitely there for you, which is nice.

Summary of normative beliefs regarding the perceived social pressure

exerted by other people to use evidence. The majority of nurses from the MJH did not perceive that nurses ancillary to the unit facilitated their use of evidence. In fact, many of the nurses did not even mention the CNC or Educator when they talked about using evidence or improving care. In contrast, the majority of nurses from the MH perceived that the PCLs and Educators facilitated their use of evidence through a variety of ways.

Multiple Cognitive Beliefs

According to the theory of planned behavior, the three cognitive beliefs (behavioral, control, and normative) influence the likelihood that the person will engage in the behavior. The importance of each belief varies among individuals and between groups/populations. For some behaviors, there may only be one or two beliefs that are important whereas for other behaviors all three beliefs may be important. Unlike the MH nurses, the MJH nurses in this studied held multiple cognitive beliefs towards change. Also, nurses from both hospitals held multiple cognitive beliefs towards the difficult patient/family. Since there were a multiplicity of beliefs towards change and the difficult patient/family, they will now be presented.

MJH nurses' cognitive beliefs towards change. The majority of nurses from the MJH MS unit perceived that, in general, change did not happen easily on the unit. The nurses perceived that behavioral, control, and normative beliefs influenced their behavior. For instance, Francesca did not mention a specific change, but believed that change was difficult for nurses in the unit. She perceived that in order to change their

behavior, the nurse needed to learn to do something differently and this was not believed to be beneficial to them (behavioral belief):

Change is hard in the unit. I guess it's just people. Human nature. Change is hard for everybody. People don't like change, no. It's hard; change is hard. People get used to doing certain things a certain way. And things change, and like oh gosh, I've got to learn something new or you gotta do it a different way or something like that. I think it's just human nature.

Similarly, Michelle perceived that change could be challenging for the unit. She shared an example about Hourly Rounds and how some nurses believed that these rounds were "stupid" or not beneficial (behavioral belief). Michelle perceived that the nurses who had the negative behavioral belief exerted social pressure (normative belief) on the rest of the group and this made it more challenging to perform Hourly Rounds. Michelle shared that, "I think...people's attitudes, obviously, in the unit have always had an influence. You know that if someone's saying, 'Well, this hourly rounding is so stupid.' It doesn't make it easy for anyone." Likewise, Cindy perceived that the social pressure (normative belief) exerted by nurses who held negative behavioral beliefs towards the change influenced other nurses to not change their behavior:

Negativity from the people who don't do it. Because, if I am pretty negative about the situation or I know that every time I say something there is somebody who I know is going to agree with me, I am going to keep talking about it to this person. And...if I have enough people on my side, then if we're all against it, five people are against it, and two people are for it, then we know it's probably not going to happen because we have more people against than we have pro. So, it is kind of one of those things. It's just really the negative feedback or the people who are kind of set in their ways.

Several new programs were introduced in the MJH MS unit during this research. The nurses' response to these changes was an indication of their cognitive beliefs toward changing or improving practice. These changes included the implementation of Hourly Rounds, which was based on evidence and computerized charting, which was not based on evidence. Overall, nurses' behavioral beliefs towards these changes were not favorable because they did not perceive that these changes improved patient care.

Also inherent in the nurses' perceptions was the behavioral belief that enacting the change would not benefit them; instead, it took more effort to do. Ajzen refers to this as the cost of enacting the behavior and he classifies it as a behavioral belief. These perceived behavioral beliefs were accompanied by discussion of control beliefs, where nurses perceived that they did not have the requisite resources or opportunities to engage in the behavior. Behavioral and control beliefs related to the specific changes are discussed together to highlight the interplay between them.

Some time in the year prior to this study, Hourly Rounds were implemented in order to increase patient satisfaction and reduce the number of patient falls. This program was similar to Patient Comfort Rounds, which were implemented at the MH and previously discussed. The majority of nurses from the MJH MS unit expressed that they did not actually engage in this behavior but would "just sign the paper," indicating that they did. There were two behavioral beliefs in the nurses' examples: (a) nurses perceived that Hourly Rounds would not improve patient/family outcomes and (b) nurses perceived that Hourly Rounds would not benefit them in any way and in fact, they were perceived to be "one more thing to do." In addition, some nurses perceived that they did not have enough time to complete this task. The perceived lack of time is a control belief in which nurses did not perceive that they had adequate resource, in the form of time, to do what was expected. For instance, Francesca believed that Hourly Rounds were not beneficial to the patient/family or to herself:

At first, they didn't like it [Hourly Rounds]. It was another thing we had to do, just another piece of paper. ... Does it really work? People go in there - okay, yeah I've been in here then. I think that's how it works. ... I can take it or leave it. ... I don't think that piece of paper is really making a lot of change. I don't think it does much for the patient care. ... I think nurses just see it as another piece of paper, something else for them to do.

Similarly, Silvia perceived that Hourly Rounds were not beneficial to the patient/family or to herself. These perceptions represented negative behavioral beliefs about the change.

Silvia also perceived that she did not have enough time to round on her patients every hour. This perception represented a control belief in which she perceived that she did not have enough resource, in the form of time, to complete the required hourly rounds. Consequently, she did not actually complete the rounds, but rather “signed the paper”:

It was really hard for me to sign the paper. First of all, I couldn't think of it; and, second of all, I didn't have the time! I had to hurry to the next thing. ... Purposeful it is not. ... So, I personally don't think it is a helpful thing, because you really not getting in there every hour any more than before... I didn't like it when I came. I didn't think it was helpful; I don't think it's useful and I still don't think it does. Because on a weekend I can sign in four times in a row - I've been in there with them but I haven't asked them if they have to go to the bathroom or turned them or done anything because I'm just in and out.

Likewise, Chris perceived that Hourly Rounds did not improve patient care (behavioral belief). He also perceived that “signing the paper” was one more thing to do and that there was no perceived benefit for him in doing this (behavioral belief). Also, Chris perceived that he did not have enough time (control belief) to sign the paper because he was “focused” on providing care to the patient/family instead of signing the paper. Unlike the other examples, Chris did not mention that he signed the paper without actually rounding on the patient. However, he perceived that there was external pressure (normative belief) to “sign that piece of paper” without regards to what the patient's needs were:

You have to sign that piece of paper on the wall. I try to tell them, the busier I am, the less focused I am on that piece of paper, because I am focused on the patient. If I'm focused on the patient, I am not signing that piece of paper, because it is not part of my focus. So, if I miss times, it is because I was focused on a patient because the patient needs were there. But, in their [nurse leaders] mind, that's all that is important. It doesn't really appear to make that much difference about making it right for the patient. They [say] sign that piece of paper.

Likewise, Michelle perceived that Hourly Rounds did not improve patient outcomes, such as reducing falls. Michelle perceived that, if an elderly patient is going to fall, he or she is going to fall no matter what you do to try to prevent it. This reflected a negative behavioral belief toward Hourly Rounds. She also perceived that “signing” the paper was

a “pain.” This reflected that Hourly Rounds were perceived to be a burden to her, which was an additional behavioral belief relating to the cost of completing the task:

They think that will help decrease the falls. But, as far as I’m concerned, if you have a confused eighty-five-year-old grandmother; and she wants to get out of bed - she’s going to get out of bed. You could be in there every single thirty minutes and it still wouldn’t matter. That has been my experience. ... It’s a pain, because we have to sign the door. Well, it used to be the door. But that wasn’t good enough, because people were just going to the door and signing it and not asking the patient anything. So now, you literally have to go in the room and sign a piece paper that you went and checked on them. ... It doesn’t always happen that way. If you go in at ten o’ clock and the nurse tech doesn’t check on them until 11:45, that’s a whole hour and forty-five minutes and no one has seen the patient.

The other change that occurred in the MJH MS unit was the implementation of computerized charting. Unlike Hourly Rounds, this change was not based on evidence. Those nurses, who talked about computerized charting, believed that computer charting was not beneficial to patient care. Also, nurses perceived that they lacked the requisite skills, knowledge, and resources necessary to chart on the computer. These perceptions related to control beliefs, or the perception that they did not have adequate resources and/or opportunities to engage in the behavior. For example, Michelle perceived that, in general, nurses were not “prepared enough” for changes that occur. She related this specifically to computerized charting and how she perceived that she was not given enough information and practice time to feel competent in charting on the computer. This represented her control beliefs that she did not have the requisite skill and knowledge to perform the task:

I don’t always think that we’re prepared enough to make changes, I guess, if that makes any sense. We switched to the computers. We took a class three months ago, and now you are going to change to the computer today and do all of your other patient stuff, as well. And, I think that that was an abrupt change. I mean, yes, everyone kept saying, yeah you are going to do the computers. But, it wasn’t a very easy transition. One day you went to work and you were doing paper, and then the next day you are on computers. I think that there could have been, maybe, some different scenarios that made it a little bit easier. Maybe another training class for some people or a practice training where you actually had to assess a patient or something.... But that was kind of abrupt and sudden. I don’t think it was facilitated the best way it could have been.

Additionally, Michelle perceived that computerized charting took a “long time” to complete and this influenced her ability to chart in a timely manner. The extra time that Michelle perceived that computer charting took, was not beneficial to patient care (behavioral belief) because it took her “away from patient care.” Moreover, Michelle perceived that the computers did not process information in a timely manner. This reflected the control belief that she lacked resources that functioned properly:

They're slow [computers] and they're very easy to map through but they take a long time to do. ... I feel like it's just very time consuming; and sometimes it takes away from patient care, because you are so worried about charting and charting everything correctly that you are not actually - it truly will take me an hour and a half to chart on four patients if I've never had them before. And, I find myself to be very computer savvy...computers are very easy for me to work with. But this is just hard; it's difficult.

Similarly, Francesca believed that computerized charting was not efficient and made her life “harder” (behavioral beliefs). Additionally, Francesca had many control beliefs and they related to her perceived lack of: (a) knowledge, (b) skill, (c) self-efficacy (fear of not remembering how), (d) computers, and (e) computers that functioned appropriately:

I think...the transition would have been easier if they had done it a little bit differently. The education part should have been longer, letting us have more time practicing it. They did it way early, and then we started two months later. So...it was like oh my God, I'm not going to remember that. So, it was like going in and trying to, and you kind of learn on your own. Then, because you can't remember everything, you're taking out your papers. And I think if it were planned better, change would be easier. ... Give me the education, more. Let me practice it more. Let me get used to it first, and then let's do it. ... The charting thing is huge. It's so much; to where we had to do before was maybe forty-five minutes for everybody. This is, you are charting for probably a good...hour, three times a day. ... They thought that it was going to make it more efficient but they don't realize that it takes more time. A lot of times the computers don't work. You have to find a computer that works; it kicks you off; it gets stuck; and it doesn't save your stuff. I mean it's frustrating. ... I mean you get better because now you know the system, but it's a lot. It didn't make our life easier; it made it harder.

Likewise, Mary perceived that computer charting was too time consuming and as a result, she perceived that the quality of patient care suffered (behavioral belief).

Additionally, Mary perceived that they were given “junk” computers that did not work (control belief):

Now we have to document...a complete assessment every four hours on the computer. It is a lot of...time consumed, where you could be doing something more for the patient. Quality of care suffers, because you are sitting and doing paperwork or computer work.... Or junk computers are given to us and they are so small or they don't work.

Overall, nurses from the MJH MS unit tended to have negative behavioral beliefs towards change, regardless of whether it was evidence-based or not. In conjunction with the negative behavioral belief toward the change, nurses also held other cognitive beliefs (control and normative) that influenced their behavior. Also, MJH MS unit nurses expressed concerns on the process of how changes or improvements were made. Their concerns about the change process included the lack of: their participation in deciding the change, receptiveness of unit leaders to nurses' feedback, communication about the change, education on the change, and support during the transition. Since these concerns occurred at the unit level, they will be covered in detail in Chapter Five.

Some of the nurses from the MJH ICU, like their counterparts in the MS unit, perceived that change in general was difficult and not embraced. For instance, Fred perceived that some people embraced change and others did not. He perceived that the nurses' ability to change their practice was not based on whether the change was perceived to be beneficial to the patient. Rather, he perceived that nurses would more readily change their behavior when they perceived that the change was positive for them (behavioral belief) and when there was minimal cost to them to implement the change (behavioral belief). The combination of prioritizing nurse over patient outcomes and the cost to the nurse had implications for how nurses incorporated patient/family preferences into their care. Also, the role that these behavioral beliefs have at the unit level will be discussed in Chapter Five:

It depends on the change. We went to computer charting recently; and that wasn't well embraced, because people were comfortable with doing something regardless of whether it is better or not for the patient's outcome. I think change, by some, is not embraced as easily as others. It also depends on the level of the change. If it is something subtle, like dating a PIC line dressing or changing an IV fluid to be more frequent or less frequent, something like that I think is more embraced. But, a bigger change, I think, you will get more resistance to the change. ... As well, the overall perception of the change by the employees - if they perceive the change to be good and new and exciting, they may be more likely to embrace it versus something that is more of a pain. Or change the way they do things when they have been doing it this way for ten or twenty years, and now they have got to do it differently. Well, there may be some resistance to that.

Likewise, Tom perceived change to be difficult in the MJH ICU. This represented the behavioral belief that change was not advantageous but it was unknown to whom (patient/family or themselves) the change was not beneficial. Also, he perceived that there were a few factors, which impeded change: money, school of thought, physicians, or nurses. These factors related to control beliefs because they could hinder or facilitate the requisite resources or opportunities for change to occur. He also shared that he was not aware of how change happened on his unit because he was not involved in the change process:

But if you are somebody who likes to institute change, it's going to be difficult as well. There was actually a nurse who just left here, that was here for 3 months. ... She was somebody who was very, very - wanted change, wanted change - wanted to do this, wanted to do that. ... I think she always talked about how it was difficult to get anything to change here. ... I don't know what hinders the process because I've not really been active in trying to change anything, in all honesty. But from what I've seen, from other people, I don't know if it's just a money issue, or a school of thought issue, or whether it's medicinal, or whether it's nursing. One or the other usually pops up.

The majority of nurses from the MJH ICU frequently mentioned two practice changes, which occurred during this study. One involved an improvement plan to correct improperly labeled laboratory specimens and the other was the transition to computerized charting. Neither of these changes was based on evidence. Similar to their peers in the MJH MS unit, MJH ICU nurses' had both behavioral and control beliefs towards these changes.

As mentioned earlier, the ICU in the MJH experienced a problem during data collection in which laboratory specimens were labeled incorrectly, which resulted in erroneous laboratory results being reported on the wrong patient. An improvement plan was put into place that required two nurses to go to the bedside and verify patient identification and placement of the correct label on the correct laboratory specimen container. Both nurses were expected to initial the label after they verified all information. Similar to the nurses in the MJH MS unit and their response to Hourly Rounds, the majority of nurses from the MJH ICU shared that they signed the laboratory label without following the verification process. Like their MS counterparts, the majority of ICU nurses did not perceive that this improvement plan improved patient care and it was viewed as a “one more thing to do;” both of which were behavioral beliefs. For instance, Sarah perceived that nurses did not take the improvement plan “seriously.” Sarah shared that erroneous laboratory results were reported for patients, which could have profound implications for the patient if the erroneous values were treated. In spite of this, nurses continued to sign the laboratory label without verifying the information. This suggests that they did not believe that the improvement plan would solve the problem, even though they were aware that there could be potential harm to the patient. Not taking the time to verify the information reflected that this task was seen as a burden to the nurse, or “one more task” to complete. The potential benefit to the patient (behavioral belief) was overshadowed by the nurses’ belief that this change would not work and it there was no benefit to the nurses to comply with the change (behavioral beliefs). Additionally, Sarah shared that unit management did not like that nurses were signing the laboratory label without verifying the information. Sarah shared that unit management informed the nurses that, if these errors continued, the nurses would be “reprimanded.” Nurses perceived this change to be coerced and they were not involved in how changes occurred on the unit. This will be discussed in detail in Chapter Five:

We've had wrong labs sent on the wrong patient for whatever reason.... And we don't know until those results are reported; and it's like, wait a minute, my patient had a hemoglobin of 14 and now he has a hemoglobin of 7. Then it is re-drawn, and the patient does have a hemoglobin of 14, or nobody drew blood in that room. So, that's something that is going on right now that we are having to deal with; and we have to double check, have another nurse come in and co-sign the label. And not everyone took it seriously; so we still had some incidences of [wrongly labeled specimens], even double noting. So, we have to continue it for a whole month. ... There were lots of little notes all over the place with a stern warning that, if this happens with double signing, that you both are going to be reprimanded for it. ... So, hopefully this will come to an end, and people will take it serious....

Similarly, Tracy perceived that the laboratory-label improvement plan was not taken "seriously." Consequently, nurses would sign laboratory labels without verifying the information. This reflected that nurses did not perceive the improvement plan to be beneficial (behavioral belief) and it was another task for them to complete that had no merit (behavioral belief). Tracy also perceived that her peers were aware of the grave consequences that could happen if they did not adhere to the type and cross match verification process (behavioral belief). In spite of this, they did not seem to transfer this knowledge to this situation and they continued to sign the laboratory label even if they did not verify the information. Again, the potential benefit to the patient (behavioral belief) was overshadowed by the nurses' behavioral beliefs that the plan was ineffective and the cost to them to complete the task was too great:

It was not [taken seriously] at the beginning; but then we had a staff meeting, and they told us they knew that we weren't taking it seriously. Because a lot of times you'd just be like, "Okay, can you sign my labs?" And then I don't know if they're thinking about it because I always look at my patient's thing and make sure it's the right patient; so, I may as well sign it. But I understand the difference. So then I was like, "Hey can you come in here, and I'm gonna draw some blood on my patient. You can check the patient." It's just like when you type and cross someone. Everyone's always pretty serious about that, because they realize there are big things that can happen, even though there are big things that can happen when you draw the wrong, ah [labs and send them on the wrong patient].

Similarly, Jean perceived that the laboratory-label improvement plan was a "safety" process that would benefit patients (behavioral belief). Despite this, nurses would not verify the information and would just sign the laboratory label. This represented a

positive behavioral belief that the plan would benefit the patient but this was exceeded by Jean's belief that the plan did not fix the problem (behavioral belief) and it took more time to verify information, which was a greater cost to the nurse (behavioral belief):

We run around and do things fast that they grab the wrong labels and stick them on the wrong patient. Or we may confuse one patient with the other out of the two that we have. ... I think, maybe, in the hurry of doing things, you grab a label that is not the right one. ... Because they said that happened several times, not just once or twice. It was a lot of times. ... It's just more time-consuming. Even though it is, yeah, it is safety. But it's a "oh God, I have to go check it." Yeah. But now people are saying, "Oh, let me go look and see where you are drawing it." I think, before, we were saying, "Oh, here, let's sign it." You trusted the nurse and you just didn't want to go take the time to do it. But that is another little thing that takes even two, three minutes total to make sure there is a right label, what is it that you are drawing, what color, and who's the patient you are drawing.

The MJH ICU also transitioned to computerized charting during data collection.

Similar to their peers in the MJH MS unit, the majority of nurses from the MJH ICU believed that computerized charting was not beneficial for the patient/family. Sarah, for example, perceived that charting on the computer "hinders patient care" by taking her away from the patient indicating that she believed that computerized charting did not improve patient care. This negative behavioral belief was supported by various control beliefs regarding the availability and functionality of the computers. Also, Sarah perceived that charting on the computer took too much time (control belief) and presents other barriers to patient/family care:

I don't like computer charting. I think that that hinders patient care. ... We just went to the computer charting; and I think there are a lot of technical things, as far as it takes a long time to get it to boot up and it times you out very quickly. You wait for it to come up - it times you out - and then you wait for it to come up; you get pulled away; you come back, and it has timed you out. So then, you have to start the process all over again; and I feel like that kind of pulls you away from the patient's bedside. Ah, there is no way to change that.

Nancy, like Sarah, highlights the obstacles (control beliefs) to computerized charting.

However, she framed the implementation as "hard," and did not identify the influence on the patient/family:

It [computerized charting] was really hard I think in the beginning, because there were a lot of glitches in the computers themselves. Well, first of all, there wasn't enough computers; because, when you have all the different disciplines coming in - I mean they are looking at test results and everything in the computers; and then you got to chart. Well there is not a computer available; and, like I said, you can't plan for when you are going to have time as a nurse to chart. So, they tried to fix that I think by getting a bunch of little laptops. They were super slow to try to get into; it took you five to seven minutes to get one working, where you could finally get in and chart. But, then you got called away again. And so, that was really hard. I think that was a big barrier. They've gotten more computers in though, the big desktop computers. They've gotten more of those I think to try and help with that problem. They've gotten a couple of mobile ones that roll around, so that's nice.

Similarly, Dawn perceived that it took more time to chart (control belief) on the computer and she found this frustrating. Dawn identified several obstacles to implementing computer charting but stops short of stating that it influenced patient care:

In theory, it's helpful in a sense that it's legible. Everyone's writing is legible and it's a little more concise. But it is more time consuming, and we have to log on to constantly go back to it and to find a computer to sit down and to log back in. And, if you're not actively working on it, it'll log you back out in a certain amount of time. So, if you're called away to the bedside for a few minutes, you go back out to the bedside and you'll come back and the computer's logged you off again. So, now you've got to sit down again, log back in, and wait for it to come back up. It's just making things a little more time-consuming. Keeping us logged in will be helpful.

Nurses from the MJH ICU expressed a general reluctance to change, which was reflected in their perceptions of how difficult it was for change to occur in their unit. Additionally, MJH ICU nurses held behavioral and control beliefs about specific changes that influenced their behavior. Similar to their peers in the MJH MS unit, the MJH ICU nurses also expressed concerns regarding the change or the improvement process. Their concerns mirrored the concerns of the nurses from the MJH MS unit (lack of participation, lack of receptiveness of leaders, lack of communication, lack of education, and lack of support). These unit-level concerns will be described in Chapter Five.

Summary of MJH nurses' cognitive beliefs towards change/improvement.

The nurses from both MJH units believed that change, in general, was not beneficial. Change was perceived to be difficult to achieve in both units. Consistent with the

conceptual definition of behavioral beliefs, the nurses doubted the benefits of the outcomes of the change. Also, they perceived that they did not have the requisite resources and opportunities (control beliefs) to enact the change. Some nurses from the MJH MS unit believed there was social pressure (normative belief) exerted by nurses who had negative behavioral beliefs towards other nurses to not adopt the change. The cognitive beliefs (behavioral, control, and normative) expressed by nurses from both units may be associated with unit characteristics that hinder or facilitate their ability to create change. This will be discussed in detail in Chapter Five.

Specific examples of change events provided insight into the interplay among behavioral, control, and normative beliefs play in EBP. When Hourly Rounds and the laboratory-label improvement plan were implemented in the MJH, the general behavioral belief was that these interventions were not beneficial. In the MJH ICU, nurses perceived that the laboratory-label improvement plan could have beneficial outcomes for the patient; but this seemed to be overshadowed by the cost to the nurses making this change and their perception that the plan was ineffective. Questions about the effectiveness of the intervention (behavioral belief) coupled with the increased burden to the nurses (behavioral belief) were followed by comments that the practice was not followed, that the practice was ignored, or that nurses falsely documented their implementation of the practice.

Cognitive beliefs regarding the “difficult” patient/family. A contingent of MJH MS unit nurses perceived that the family could be difficult. When faced with the difficult family, nurses tended to avoid them. The MJH MS unit nurses shared behavioral and control beliefs that influenced their behavior. For example, Grace perceived that the family could be an obstacle to completing the patient’s care (control belief). However, at the same time, she believed that they were beneficial to have around (behavioral belief) because they could obtain information from the physician: “Okay, I know it seems like,

oh, family gets in the way; but, at the same time, you're like, okay, you need to ask this doctor this, this, and this." Likewise, Michelle perceived that patient/families that complied with her routine were beneficial to have around (behavioral belief). Conversely, when the patient/family questioned what was happening, Michelle believed that they created an obstacle (control belief) for her to provide care. Consequently, Michelle perceived that her "care was not as good as it could be" (behavioral belief). Michelle's avoidance of the patient/family made it more difficult to inform and involve them in care decisions:

Michelle: Well, if the patient and the family are nice, it's a lot easier to go in there and be very, very friendly. But we all have our patients and family members that you would just rather not see, which is kind of a pain. It's unfortunate; because you hate not taking care of your patient, because their daughter is a pain in the butt and went to nursing school for one semester and thinks she knows everything, which is usually the case with everyone. ... So, I try not to let it get in my way too much. I try to stay on track and care for my patients the best I can. But sometimes it does have an effect, especially if the patient's family is a pain.

Kim: What do you do differently if they are a pain?

Michelle: If I know going in that the patient's family has a daughter that is pain, I do everything right away, any wounds, any meds, anything; I do it right away. And then sometimes I just kind of check on them, every so often. I probably don't go in there as much as I normally would. ... Sometimes you have to go in there; sometimes you can't just let them go. ... The other day, this lady was looking over my shoulder as I was putting an IV in. I was like, "Do you mind if you just stepped out of the room, just so I can have some privacy and do this?" You know, it was like, "Why? What are you going to do to her?" "Nothing. I, just, need my space." So, you try to ask that. Sometimes they like that, sometimes they don't. So, I think that sometimes if the patient's family is negative, they're mean, or a pain - then sometimes your care isn't as good as it could be.

Jennifer, like Michelle, perceived that some families were difficult when they asked questions and interrupted her routine (control belief). Jennifer went so far as to ask the Nurse Leader (Nurse Manager) if visiting hours could be restricted so she could avoid dealing with families until early afternoon. Again, this did not facilitate communication between the nurse and the patient/family, which led to their input not being incorporated into their care:

I was actually asking for visiting hours to be restricted on our floor. We have families coming in at nine, ten o'clock and complaining how come Mom isn't bathed yet. Well, because it's morning and we are still in the process of doing all that. So then, you stop and you waste your precious time in trying to explain things, which of course you can't explain. And you have to drop everything, what you are doing, and focus on this particular patient that really doesn't need attention at this time. So, I was asking for, at least, visiting hours starting at one o'clock, thinking that our patients are sick, that we need privacy - they need privacy - everybody needs privacy. Pull the curtain here pull it back. We don't need visitors looking at patients being bathed and stuff like that. I think that would be a reasonable excuse.

Similarly, there was a contingent of MJH ICU nurses who perceived that families could be difficult at times. Nurses shared certain behavioral and control beliefs that influenced their behavior. The family is important in the ICU because oftentimes they are the decision-makers, because the patient is unable to actively participate in their care. Viewing the patient or the family as difficult did not facilitate their involvement in care decisions. For example, Tom perceived that families did negatively influence the care of the patient (behavioral belief). This occurred when the family created obstacles (control beliefs) and he would avoid the patient/family and in the end, the patient's care suffered:

Tom: I have found that sometimes you can have certain family members that actually really impact the care of the patient themselves. ... Because, if somebody is really, really just demanding - you go in the room, and they're always wanting something or the other. That can impede care because, naturally, you are not going to even want to go into the room because you are too afraid to go into the room. That can impact the relationship with the patients themselves. I've even given report, "The patient's fine; the family members are crazy." So, that I think can change the relationship a lot - having very active family members to the point that they are advocating way too much.

Kim: How do you deal with those situations?

Tom: Well, I try to advise them more or try to educate them and talk to them more than I do the patient themselves, which is what is kind of disturbing. ... I just constantly communicate to the point where I'm blue in the face. Another tactic sometimes used, I feel bad saying this - you can lose somebody in the jargon. ... But, if you completely start using big words and medicine that you know they don't understand - they stop. If they are going to be particular about this, that, and the other, then I blow it off. I blow it all up. Medicines, I use the mechanism of action; I'll say everything; I'll say particular part of the brain. I'll say every medical term that just displays that I'm not a layman and that usually quiets them down, unfortunately. Being an unethical practice in our nursing, we are supposed

to talk layman. But I found actually the ones that are very difficult, if you show a lot of intelligence, they kind of back off.

Similarly, Tracy perceived that families created obstacles when they “misconstrued” what she said (control belief). When this occurred, Tracy tended to avoid the patient/family but, unlike Tom, she did not believe that this influenced the patient’s care:

Tracy: Well, I'll give you what ever you need. But, I'm not gonna come in here and non-stop ask you if I can rub your back or something.

Kim: It sounds like you avoid them?

Tracy: Well at that point, yeah; because then you don't know, because they misconstrue everything you say. Or you think you're being nice, and they don't think so.

Likewise, Sarah perceived that sometimes it was beneficial to have the family around (behavioral belief). She believed their presence was beneficial when they did not interrupt her routine. Conversely, families that upset her routine, created obstacles for her (control belief) and Sarah then believed that care was difficult to deliver:

I think the family makes a big difference - it shouldn't be, but I think that it does. Depending on how the family, whether they're nice, they let you get in there and do your job. There are some families where they're very much right on top of you, and sometimes you feel like they're just watching you. Sometimes it's difficult to take care of that patient. And there are other times when you have this particular family, very nice, they get out of your way, but they're always in there. Nobody really has a problem with them being there. ... And then I think just either tone of voice in criticizing what you're doing. You want to take care of the patient, but yet it makes it very difficult when the family is just hovering and very defensive.

In contrast to the nurses from the MJH, nurses from the MH MS unit did not readily talk about difficult patient/families. Instead, they shared two behavioral beliefs: (a) the relationship with the patient/family was beneficial and (b) this relationship resulted in favorable outcomes for the patient/family. For example, Marcy perceived that the relationship that she developed with the patient/family was beneficial (behavioral belief) to the patient/family:

Well I think a lot of it is once you have that rapport with somebody, once you have that relationship, you want to do everything that you can to help them out. So, if they're ready to be discharged and they're like, “Oh Marcy, I just want to go

home; I'm ready to go home," - let me call the doctor. Let me do this, and you don't feel like, 'Uh, all right well I'll have to go call the doctor then,' you just don't. ...But most times you just feel like its more of a friend than a patient; yeah, well I'll see what I can do; let me get it for you. You're in pain; let me get you pain medicine.

In addition, Debbie believed that the relationship she developed with the patient/family was beneficial to the patient/family. She also believed that this relationship did not negatively influence the care that she provided:

Debbie: There are difficult families and challenging... personalities. So like an angry or aggressive personality makes it hard to develop that relationship that you need to with a patient. But you just have to think. I just think about all the things that could be going on with them that I don't even know - or the situation that they're in if it is a new diagnosis, or a terminal, or something. So I just try to look at it as - I'm not in their shoes. I don't know how they feel. ...

Kim: How does that relationship you develop with the patient and the family impact your care decisions?

Debbie: I try not to let it impact it, especially if it's negative. I'm still there for the patient. I still would have to, no matter how the interaction's going; some personalities will just clash. ... But I just try to be positive and try not to put up a defensive wall because, if you've got two people with a defensive wall, it doesn't go anywhere.

Likewise, Cathy also believed that the patient/family relationship was beneficial. She also believed that she always did "what was best for the patient," regardless of whether the relationship between her and the patient/family was strained or not:

For the most part, I don't let the relationship that I have with the patient and family impact what I do. I mean I'm just trying to do what's best for the patient. ... So, you're trying to talk to them...and make the patient comfortable, even though they have family that wants to push food or other things that aren't appropriate for him. But, for the most part, you have to work out what's best for the patient, even if the family is not agreeing. I mean that's how it is.

In addition to perceiving that the patient/family was the "boss," the majority of nurses from the MH ICU dealt with difficult patient/families similar to the way they treated other patient/families. They believed that the relationship with the patient/family was beneficial. Perhaps, more importantly, they believed that the outcome of care benefited the patient/family because they perceived that they provided the same evidence-based

care to all patients. For instance, Ethel perceived that the patient/family relationship was beneficial and she provided the same evidence-based care to all patients:

We try to meet them [difficult patient/families] head-on and answer their questions. Try and help with their concerns, give them support. We have a wonderful palliative care team... that will come spend time with them and help to give them any information of different options that would help them.

Likewise, Jill did not mention that the patient/family relationship was beneficial. However, she did believe that she provided the same evidence-based care to every patient in the unit:

I think I'm very good at treating the patients the same, whether or not they have a big family influence or not. Everybody deserves the same treatment and everybody - I think I do fairly well at that - at least I like to hope I do.

Summary of cognitive beliefs regarding the difficult patient/family. The MJH nurses perceived that behavioral and control beliefs influenced their behavior when providing care to difficult patient/families. They believed that the difficult families created obstacles to care (control beliefs) and when this occurred, the nurses avoided the patient/family and care outcomes were not as good (behavioral belief). In contrast, nurses from the MH perceived that the relationship with the patient/family was beneficial. Also, they believed that they provided evidence-based care to all patient/families, which yielded positive outcomes.

Chapter Summary

Nurses from all units perceived that EBP was the use of some type of information in practice. Sources for this information included research or evidence, hospital improvement data, or information gained from experience. No nurse defined EBP the way it is defined in this study, which includes three dimensions: the use of evidence, incorporation of patient/family preferences, and clinician expertise. For the most part, nurses from both hospitals perceived that EBP was the use of evidence in practice, which is considered research utilization. Also, all nurses believed that using evidence to

guide practice was beneficial (behavioral belief). MJH nurses did not readily identify that using evidence in practice was what they did. In contrast, the majority of nurses from the MH perceived that EBP “is what we do” here. EBP took on an expanded and more active role in this hospital.

Other salient behavioral beliefs, which influenced nurses’ use of EBP, included their beliefs towards changes or improvements to practice and informing and involving the patient/family in care decisions. These behavioral beliefs were central to the nurses’ adoption and maintenance of EBP, as it is defined in this study. Regarding nurses’ behavioral beliefs towards change, the MJH nurses, overall, believed that change was not beneficial. Concerning specific changes, which occurred during this study, nurses did not perceive that the specific change improved patient care. They also perceived that engaging in the change would not benefit them and was viewed as a burden or “one more thing to do.” Additionally, control and normative beliefs influenced the MJH MS unit nurses’ behavior and led the nurses not to comply with the change and falsely sign that they did.

In contrast, the majority of nurses from the MH believed that change was beneficial to both the patient/family and themselves. Overwhelmingly, MH nurses perceived that change improved patient care or their environment. They did not mention what the change might cost them; rather, they just did it because it was good for the patient. The behavioral beliefs expressed by nurses from both units might be associated with unit characteristics, which hindered or facilitated their ability to create change. This will be discussed in detail in Chapter Five.

No nurse in this study perceived that including patient/family preferences in care decisions was integral to EBP. Anticipating this, participants were asked how they came to know what the patient/family wanted to have done and how they incorporated this into the plan of care. Nurses did not speak of informing patient/families of evidence-based

options or of assisting them in the decision-making process. Rather, nurses spoke of how they informed and engaged with the patient/family in general. For the most part, the majority of nurses from all hospitals believed that informing the patient/family was beneficial. In fact, providing information on care interventions that had already been decided was viewed as a central role of the nurse. However, the nurses' behavioral beliefs towards involving the patient/family in care decisions varied between hospitals. For the most part, MJH nurses did not mention that they engaged patient/families in shared decision-making, which is a defined dimension of EBP. They were not mindful of this and consequently, there was no behavioral belief toward involving the patient/family in shared decision-making. Yet, a few of the MJH nurses perceived that it was beneficial to engage the patient/family in shared decision-making. In contrast, the nurses from the MH MS unit shared a nascent perception that the "patient was their center." This concept was more fully developed in the MH ICU, where a majority of nurses perceived that the patient/family was their "boss."

Nurses identified several key control beliefs or factors, which facilitated or hindered their use of EBP. These factors included: experience guided practice, evidence was embedded, adequate resources and supplies, and information sources. EBP is defined in this study as the integration of evidence, patient/family preferences, and clinical expertise. The majority of nurses primarily relied on their experience to guide their clinical decision-making and to inform them what to do for the patient/family. The control belief that experience informs practice favors nurses' reliance on experience or procedural knowledge as their source of information rather than research.

Nurses in this study also held the control belief that peers were their primary source of information when they came across something they did not know. When deciding whom to ask for information, overwhelmingly, nurses cited that experience with the situation was the key factor. However, some MH nurses shared that they sought

information from people who exhibited subject-matter expertise. There might be a tacit understanding that certain nurses or other resource people had expert knowledge, but this could not be substantiated by the data. MH nurses also shared that, if their peer did not know the answer, they readily looked to evidence-based care documents to guide their practice. This was tied to their belief that everything they did was evidence-based and to the expectation that they would follow standards of care, which will be discussed in Chapter Five. Looking to evidence-based documents was not readily evident in the MJH; although, they too, would “go on the computer” to look something up that they were unfamiliar with. This tended to be diseases and medications and not how care was provided.

Another key control factor cited was having adequate resources and supplies. Overwhelmingly, nurses from the MJH perceived that they did not have enough nurses, supplies, and equipment, which prevented them from implementing or following evidence-based interventions. On the contrary, the majority of nurses from the MH perceived that they had adequate resources and supplies, which facilitated their ability to incorporate evidence-based interventions.

The majority of nurses in this study shared that they used the computer as a source of information. They shared that they primarily used evidence-based Intranet sites for informational purposes. However, the nurses from the MH also perceived that they accessed the computer to retrieve evidence-based care documents about something they were unfamiliar with. The majority of nurses perceived that they did not question their practice or look for care alternatives; rather, they followed the provided evidence-based care documents.

Nurses identified four referent groups, which influenced their use of evidence. One group was their peers. It was not the norm for nurses from both hospitals to turn to research to solve patient care or unit problems. However, the MH had the Nursing

Research and Outcomes Council (NROC), which was part of their shared governance structure. The NROC, which was comprised of staff nurses, made practice changes based on research. However, the NROC was the best-kept secret of the MH, as the majority of nurses were not aware of its existence. The MH ICU also had a unit-based Journal Club, which was led by staff nurses. The Journal Club afforded a means in which nurses reviewed research articles and decided what implications the findings had on their practice.

Another referent group were the physicians. The majority of nurses from the MJH MS unit lacked awareness of whether or not physician practice was based on evidence. However, the nurses from the MJH ICU perceived that physicians could either facilitate or hinder their use of evidence. Some physicians in this unit were receptive to new knowledge while other physicians would rather do things as they always had. In contrast, the nurses from the MH perceived that physicians, especially those in leadership positions, facilitated the use of evidence. They accomplished this by leading evidence-based improvement programs and by developing evidence-based care documents, which helped ensure that care was based on current evidence.

Two other referent groups influenced nurses' use of evidence. One referent group was nursing management. The majority of nurses from the MJH perceived that nursing management did not influence their use of evidence. In contrast, the nurses from the MH perceived that nursing management did facilitate their use of evidence. This belief was weaker in the MH MS unit than in the MH ICU, where nursing management was perceived to be influential.

Another referent group consisted of other people. The majority of nurses from both MJH units did not perceive that the Clinical Nurse Coordinator and/or Educator influenced their use of evidence. In contrast, nurses from the MH MS unit perceived that the Patient Care Leaders and the Educator facilitated their use of evidence. The MH MS

unit nurses perceived that the Patient Care Leaders and/or the Educator were integral in retrieving evidence to change practice. They also perceived that the Patient Care Leaders facilitated their use of evidence via their leadership role in the Journal Club. The majority of nurses from the MH ICU perceived that their Educator facilitated their use of evidence and that this primarily occurred through educational offerings.

Chapter Five

Unit-Level Basic Assumptions and EBP

Concept Review

Organizational culture is a multidimensional, multilevel concept. This study focused on the culture at the unit level and its interaction with individual beliefs and behavior. A reciprocal relationship exists between individual cognitive beliefs and culture because individual cognitive beliefs and resultant behavior help form the culture, which in turn defines how people should think, feel, and act. Culture continuously evolves and is defined in this study as the pattern of shared values, beliefs, and basic assumptions that are learned as a group solves its problems of external adaptation and internal integration, which in turn influences beliefs and behavior of individuals in the work group (Fine, 1979, 2006; Harrington and Fine, 2000; Schein, 2004). Culture helps people make sense of their environment and provides for stability, consistency, and meaning.

Culture, according to Schein (2004), has three levels. The three levels are: artifacts, espoused values and beliefs, and basic assumptions. The levels of culture are in essence how visible the cultural phenomena are. Schein posits an iterative relationship between the levels in that artifacts are reflected in espoused values and beliefs, which are reflected in basic assumptions, which in turn influence artifacts. Artifacts include what people see, hear, and feel. Values and beliefs are explicitly articulated norms and reflect what ought to be and are negotiable. Values and beliefs are transformed into basic assumptions once they have reliably solved the group's problems. Basic assumptions are taken for granted and there is little variation within the work group; the degree of consensus results from repeated success in implementing certain values and beliefs while solving problems. Basic assumptions reflect the core culture and guide behavior and tell people how to perceive, think, and feel about things. They are shared and mutually reinforced.

Schein (2004) identifies six dimensions of culture around which basic assumptions are formed: (a) the nature of reality and truth, (b) the nature of time, (c) the nature of space, (d) the nature of human nature, (e) the nature of human activity, and (f) the nature of human relationships. Since all cultures are different, not all of these dimensions carry the same significance in any given culture. Also, these cultural dimensions are dynamic, are constantly interacting to form a pattern or paradigm, and are deeply connected. They also provide a means to sort the data into meaningful categories. Many basic assumptions emerged from the data, which could easily be clustered around these cultural dimensions. Only basic assumptions that pertain to three main concepts, which emerged from the data and influenced nurses beliefs and behaviors regarding EBP will be presented. These concepts were discussed in Chapter Four and include: use of evidence, change, and patient/family centeredness.

Assumptions relating to these three concepts can be clustered under three cultural dimensions identified by Schein. The first dimension that will be used is the nature of reality and truth. Basic assumptions that pertain to this dimension include how the group defines their environment, that is, what is real and true. This involves such things as measurement, information, data, knowledge, and feedback. The nature of reality and truth determines what is important for the work group to respond to. The second dimension is the nature of human activity. Basic assumptions under this dimension define the right thing to do. Assumptions that pertain to this dimension relate to the mission, goals, and primary tasks of the group. The last cultural dimension is the nature of human relationships. Basic assumptions that fit this dimension define how people relate to each other, how conflicts are resolved, and how decisions are made.

These three cultural dimensions will guide data presentation in this chapter. Each cultural dimension will be introduced along with relevant attributes, which emerged from the data. This is where the basic assumptions and illustrations from each unit will be

presented. Each unit has a unique culture, and as such, each unit has different assumptions under which it operates. The basic assumptions will be tied back to the salient cognitive beliefs presented in Chapter Four as well as the three main concepts of how things change, use of evidence in practice, and patient/family involvement in care. A summary will be provided at the end of each section.

Cultural Dimension: The Nature of Reality and Truth

The nature of reality and truth incorporates a “set of basic assumptions about what is real and how one determines or discovers what is real” (Schein, 2004, pg. 140). According to Schein, basic assumptions pertain to such things as measurement, information, data, knowledge, and feedback. Basic assumptions about the nature of reality and truth define the reality the group faces and helps them to determine what is important to respond to in their environment. For this study, the nature of reality and truth primarily related to how effective communication was regarding change. As previously mentioned, being able to change practice plays a predominant role in the adoption and maintenance of EBP. Each unit operated with basic assumptions that related to these attributes: (a) nurses’ awareness of the “what?” and “why?” regarding changes, (b) how effectively changes were communicated, and (c) how the nurses determined what was important to focus on, improve, or change. The basic assumptions about these three attributes of the nature of reality and truth influenced the nurses’ cognitive beliefs toward EBP.

Nurses’ awareness regarding the “what?” and “why?” of change. Nurses’ awareness regarding the “what?” and “why?” regarding proposed changes varied across the units. Frequently, nurses cited that knowing about the change and the reason for the change influenced their ability to change their behavior. Their awareness of the change and the reason for the change was related to the effectiveness of the communication process. As previously mentioned, the majority of nurses from the MJH had negative

cognitive beliefs towards change and perceived change to be difficult. In contrast, the majority of nurses from the MH had positive cognitive beliefs concerning change and perceived it to be easy.

The MJH MS unit operated with the assumption that nurses were typically unaware of changes that occurred and if they did know about the change, often they were not aware of the reason for the change. The lack of communication regarding proposed changes created an environment in which nurses were not aware of the “what?” and “why?” about the change. Consequently, nurses could not readily identify what was important. For instance, the MJH decided to pursue Magnet designation a few years prior to data collection for this study. Obtaining this designation required a cultural transformation to occur within the nursing department. This was a large undertaking by the organization and required communication and involvement of staff nurses. Nevertheless, half of the nurses from the MJH MS unit who were interviewed were unaware that the hospital was pursuing Magnet designation. When asked if they had heard about Magnet, Lucy and Michelle stated, “No.” Once Magnet was explained and Michelle was told that shared governance was part of it, she remembered hearing about Magnet but did not recall hearing anything recently: “Oh! Yeah! Okay. That does sound familiar, yeah; but I haven’t heard anything about it.” Michelle also remembered that she led the Staffing Council. This council posted information about different nurses on a bulletin board, but nursing management “took the board away” without informing Michelle of this change:

Michelle: Yeah, it was really one day. It was, “Okay, this is what we are going to do.” And you guys are on the council, then you will meet. And, then that was it.

Kim: What council were you on?

Michelle: Staffing, yeah, because I know what I did. We did a get-to-know-the-nurses, and so every two weeks we would feature another nurse and put up fun facts or interesting facts about them. And, we did that for maybe four or five

nurses. Then, no one told us to stop doing it. Yeah, I stopped doing it; because the board that I was using got taken away for something else, actually.

Further support regarding nurses' awareness of changes, which had occurred in the hospital, was evident in the perceptions of two nurses who were aware that the hospital was pursuing Magnet designation. These nurses were aware that hospital-based shared governance councils continued to meet. However, John perceived that, if you could not attend the hospital-based council meetings, you would not know what was happening:

I mean a lot of things are talked about at meetings and councils; but, depending on the length of the meeting or council, you can't get off the floor so we can't go. ... Meetings and councils, if you can go, great; if you don't, well then you miss out.

Likewise, Cindy perceived that staff nurses were unaware of what occurred in the hospital-based councils. Also, Cindy was unaware of why the unit-based councils were "dissolved." This lack of communication kept nurses in the dark regarding changes and the reasons for the changes. The lack of awareness also influenced the nurses' cognitive beliefs towards change:

I think, unless you go to seek out that information and find out when they have their meetings and when you can sit on that, then we don't know about it. I don't think it is fair; because, I mean, it's much easier to attend a meeting with your staff or your peers than to go to a bigger meeting where you have members of the management team and you kind of feel like a little fish in a big sea kind of thing. I don't understand what happened and why it dissolved from the regular individual staff things, but I think it would be much better if we just had it back on our unit.

Cindy also perceived that she was unaware of the reason why Hourly Rounds were implemented and how they could benefit the patient/family. Instead, she perceived that nurses were told to perform the hourly patient check without understanding the reason why. The lack of communication created an environment in which nurses lacked awareness about why their practice had to change. The lack of awareness made it more difficult for the nurses to identify what was important. Also, the lack of communication

influenced their behavioral beliefs; because they did not perceive Hourly Rounds to be beneficial to the patient/family, which in turn influenced their behavior. Once Cindy understood the potential benefits to the patient/family, she no longer viewed hourly rounds as a “tedious task.” Cindy’s perception exemplified the lack of awareness on the nurses’ part toward change:

Cindy: I know more recently...we started this hourly rounding kind of system at the hospital. And, when they first initiated it, everybody was, wow - you want us to go check on the patient all the time. And later on, when I finally got to understand the big picture of it, it actually made sense. It’s not only about patient satisfaction, but in the end it has probable outcomes for the patient. ... When I finally understood it like that, I was, oh, this is not just a tedious task that I need to do. This is actually something that can benefit my patient.

Kim: How did you come to that understanding?

Cindy: Mainly, people explained it to me.... ... It was like I take a lot of vacations, and then every time I come back there is something new. And so, it was one of those things in the beginning, what do you want us to do now? I don’t get this. Okay, whatever. ... So, I sat down with the Nurse Manager, Team Leaders, and other management personnel. Finally, when they broke it down the way I needed to hear it, then it’s, oh, okay.

The MJH ICU also operated with the assumption that nurses were typically unaware of changes; and, if they did know about the change, they were not often aware of the reason for the change. In contrast to the nurses from the MJH MS unit, the majority of nurses from the MJH ICU were aware that the hospital wished to attain Magnet designation. However, recent communication regarding the status of where the hospital was in this process was lacking. Additionally, many nurses were unaware what Magnet was and why the hospital wished to achieve this designation. The ineffective communication created an environment in which nurses could not readily identify what was important. For instance, Fred was aware that the hospital was interested in pursuing Magnet designation; yet, there was a lack of recent communication regarding the status of this project:

I don’t really know [what Magnet is]. I have heard different things. To me, a Magnet hospital is, I guess, a national recognition to a certain degree. I know you

have to meet certain benchmarks to be considered a Magnet hospital. I don't think we are there yet. I think we are working on that. I don't know how that process is going or exactly what they are doing. ... No, [I have not heard anything recently].

Likewise, Sarah, when asked what she had heard about Magnet, sated, "Nothing" and it had been "at least a year." Sarah perceived that the hospital was no longer actively pursuing Magnet designation, but she was not sure since there was a lack of communication in this matter: "As far as I know, I'm under the impression that the Magnet journey has stopped or that it's going to resume; I don't know. I just know that we pushed for a while, and then it stopped." Similarly, Ricki remembered hearing about Magnet when the process first started; but he was unfamiliar with what it meant for the hospital. Also, he had not recently heard anything about Magnet:

Ricki: It's some sort of status. That's all I know. Some sort of status to be achieved that will make your - I don't even know what it does for the hospital other than [silence]. ... Oh, yeah, yeah, yeah. Yeah, where they were doing the surveys and they were doing the application process; but they gave it up, didn't they?

Kim: Have you heard anything recently about it?

Ricki: No. I thought that's what you were going to say that they were going back to it. But I remember that they were having forums and they were giving out dates about the application process, and then it stopped.

Kim: Do you remember when it stopped?

Ricki: I don't remember. I haven't heard about it in so long.

Also, Dawn was a member of the initial Magnet steering committee, which worked with consultants to devise a plan to assist the MJH in attaining Magnet designation. Dawn perceived that, "because I am a staff nurse," she did not know where the hospital was regarding the Magnet journey:

I'm not sure where we're at. I know they had thought about applying, but it's a big process. And I don't think - they have had a committee come in, and we had a gold star committee a couple years back that I was part of. And they had people come in and review and see where we stood then and try to make a plan - an action plan of, okay, we're here now. What do we need to be to get Magnet? ... I'm not sure whatever came of that; because I'm a staff nurse. I hear some things

but not a whole lot. And so, I don't quite know where we are with Magnet or where we're at with the application process and all; I don't know.

Additionally, MJH ICU nurses also perceived that there was a general lack of communication regarding changes and the reasons for them. For example, Jean perceived that information about changes was posted and verbally mentioned. In spite of these communication efforts, Jean shared that there were documentation changes made, which she was not aware of:

Usually the things that are posted, somebody has already mentioned it. Though, one thing, there was a lot of charting the other day that I didn't know. And they said, "Oh, remember we are not supposed to chart on the such and such." And I said, "I thought we were supposed to, last time I heard." And they said, "Oh, no. They changed it. Now we don't have to chart on that. Make sure you make a note of it when you go to chart. It has changed." But I didn't know that. It just came up. So, that part I didn't know.

Also, Tracy encountered a situation in which "hospital policies" were changed and nurses were unaware of the change. This was frustrating for Tracy, because she found it "difficult" to know what was important:

It's just different policies that are changed and you never know. It's just like computer charting, and it's different than our paper charting. And they're trying to change different things that you have to chart. I can't think of what was up yesterday. They told us that for education, when you educate your patient on the computer charting, they have this flow sheet where you just click what you educate them on. And then yesterday, they're, by the way, we're getting dinged because we haven't been writing education in notes. Just little things, all different changes, and we try to keep up with what the different rules are.

Additionally, Nancy perceived that the "key" to change was communication. She perceived that knowing the reason "why" something was changed was beneficial. Understanding the change influenced her behavioral belief toward the change and, in turn, her behavior. Nancy perceived that communication was a "work in progress" in the MJH ICU:

I guess not knowing - sometimes maybe a communication thing, just not knowing why they are or aren't doing something. ... I just think that the key is communication. And I think that that seems to always be a work in progress to try to communicate better. ... And, I think they're trying to - like the e-mails and stuff - trying to use that more; but I think that, and I don't know why it's here because

where I was previously, we used to use e-mail and I felt more informed. And I know that our manager - I know that we get a lot of e-mails, but I never seem to have the time to sit and read them. Like, where I was before, I used to read my e-mails; and I never seem to have a lot of time to read that here. ... So, I think communication is just the biggest thing and the hardest thing.

Furthermore, Wilma perceived that nurses in the MJH ICU did not understand the rationale behind certain evidence-based interventions. Not understanding “why” something was to be done influenced the nurses’ behavioral beliefs and, in turn, their behavior:

But what I see is...it's do, do, do, do - just the task and not the rationale behind it. ... They put them [nurses] out there, okay, this is how you just got to learn. You got to do it. Well, but, if you don't know why you're doing something, you could, you know - I could train her, God bless her, if I could, the vacuum [points to vacuum]; but she doesn't know that...electricity can hurt you, the principle, the rationale. ... And I tell you they're trying to get people on board with something simple, getting the blood cultures done before you give the antibiotics.... Or, why you need to get some fluids maybe before we hang the Levo - just simple things, ABCs, you know, oxygen, blood sugar.

In contrast to the units from the MJH, the nurses on the MH MS unit operated with the assumption that nurses were aware of the how and why changes occurred. Also, they perceived that knowledge was the “key” to changing their practice in order to incorporate evidence-based interventions. The communication present in this unit created an environment in which nurses knew what was important and why it was important. This awareness influenced their cognitive beliefs. For instance, Barb perceived that nurses were provided with information and that this information facilitated nurses to change their behavior to follow evidence-based practices. For Barb, knowing “why” they had to do something was beneficial (behavioral belief), because it facilitated nurses to change their behavior to incorporate evidence-based practices:

Using evidence in practice is easy, because they educate us with information. We all had to go to a program about that [EBP] where they presented all the information on here's what we're going to follow and why. I think them telling us why we do something makes a world of difference. Don't just tell me to do it; make me understand - why that infection is going to go all over. Make me understand why I have to wash my hands. People don't get it if you don't explain

it. And I think they do a pretty good job at the why. I think they could do a little more. But that definitely helps.

Likewise, Mona perceived that nurses received “a lot” of information on changes before they were expected to change their practice. Mona talked about the PASS tool, which was part of the evidence-based BOOST improvement project. Nurses were provided with the how and why the change would occur. Verbally passing along this information facilitated nurses in changing their practice and helped them to focus on what was important:

We always do a lot of education - make sure everybody is educated before we implement something. For example, with PASS tool, they've been talking about it every meeting before they even start that. Maybe a few months ahead of time, “Okay, we're piloting this stuff.” And then we actually have to get, not a class, but kind of like an inservice with our educator for thirty minutes about it. So, we have more information before we actually started the program. Now, when we started it, we get a lot of help, not only from our PCLs but our CN3s. Actually, they have to come in extra when we first started it, just because it's something new to us and we're in the transition process. And then we just have to keep on like reinforce it to everybody, and then we get feedback to make sure that everybody participates. But anything that's new, that's how we do it. Just reinforcement and discuss it with everybody. And then we all have to do it if we get checked off to make sure we're doing it.

The MH ICU also functioned with the assumption that nurses were informed of how and why changes occurred, and the nurses perceived that knowledge was the “key” to changing their practice to incorporate evidence-based interventions. The communication in this unit created an awareness on the nurses' part regarding the “what?” and “why?” of the change. Their awareness helped them to focus on what was important and it influenced their cognitive beliefs. For example, Claire perceived that knowing “why” a practice was changing facilitated the nurses' ability to change their behavior. Claire talked about the introduction of the chlorhexadine bath, which was an evidence-based intervention; and she perceived that there could have been more education regarding this change. Claire perceived that information and understanding was “key” (behavioral belief) to nurses changing their behavior in order to incorporate

evidence-based interventions:

And I just think it's unfortunate; I think we could do better in educating our staff on these new types of practices incorporated. And I think knowledge is really the key. I really think knowledge is the key. For people to embrace a change, knowledge is going to be helpful. You are still going to have resistance, because it's a change in practice. But I think that knowledge and understanding - I don't think people understand why a chlorhexadine bath is a positive thing to do for every patient in the Intensive Care Unit.

Similarly, Betty perceived that nurses received a lot of information regarding pending changes and that this facilitated their adoption of the change. Betty specifically mentioned that they recently started to use the GlucoStabilizer®, which was an evidence-based computer program which guides insulin dosing to control the blood glucose level. The nurses received information about the software and why they were going to use it. Also, MH ICU nurses believed that understanding the change was beneficial (behavioral belief) and they embraced change:

I think that when we do have change that we're fairly educated on what that change is going to be. We just started this thing called GlucoStabilizer®; I just had it my last shift.... .. While I was working with it, several people - we all got in-serviced on it - but several weeks, a month, has gone by; and now we're just starting to get it. So all my coworkers were coming up and saying, show me how you're doing this. How did you - where do you go from here and there? So we're interested, and when we make a change, we all kind of just gravitate to who's learning it - show me, let me watch.... So I think that's why we adapt well, because we kind of embrace it....

Likewise, Jill perceived that change was easy on the unit; because nurses were given a great deal of information about changes before they happened. Again, the frequent communication created an environment in which nurses knew what was important. Also, Jill's perception reflected the behavioral belief that understanding the change was beneficial and that nurses embraced change:

For the most part, I think it does [change is easy]. You always have your people that are going to resist it, no matter what. You always have the people that are going to go with it, no matter what; and you always have those that are in the middle. But I think it does, because I think we're very supported. I think our manager does a great job at letting us know what's coming, educating us as far as what's changing and how it's changing and stuff like that. I think the hospital does a good job as far as getting us in-service.... .. I think they do a fairly good

job of letting us know when change is going to come, and I think we're fairly accepting of it.

Summary of nurses' awareness regarding the "what?" and "why?" of change. The majority of nurses in this study perceived that knowing the "what?" and "why?" of impending changes influenced their ability to change their behavior. The MJH nurses frequently perceived that they were not aware of changes and/or the reasons for the changes. These changes could be evidence-based interventions, such as Hourly Rounds, or non-evidence-based changes, such as changes in how the nurses document. Their lack of awareness inhibited their ability to form cognitive beliefs towards the change; and, consequently, it was more difficult for them to change their behavior. Also, their lack of awareness created an environment in which they did not know what was important. Interestingly, some nurses from the MJH perceived that information was the "key" to facilitating change.

In contrast, MH nurses were well aware of evidence-based or nonevidence-based changes and the reasons for the changes. Understanding the reason for a specific change enabled the nurses to perceive that the change was beneficial (behavioral belief), which in turn facilitated their adoption of the change. Also, the frequent flow of information clearly defined what was important, why it was important, and what was expected. The majority of MH nurses, like some MJH nurses, believed that information was the "key" to facilitating their ability to change their practice in order to incorporate evidence-based changes.

How effectively changes were communicated. Considering the effect that awareness of the "what?" and "why?" regarding the change had on nurses' behavior, how effectively changes were communicated becomes important. The manner in which changes were communicated and the effectiveness of the communication varied across the units. The MJH MS unit operated with the assumption that changes were

communicated informally or formally and that these communication methods could be either effective or ineffective. Although the MJH MS unit employed a variety of communication methodologies to convey information, the majority of nurses perceived that they were informed of changes via informal word-of-mouth and/or staff meetings. In light of their lack of awareness regarding changes, these methods of communication did not appear to be effective. For example, Chris perceived that changes were communicated by word-of-mouth. This was not always an effective way to communicate; because Chris perceived that, if you were not at work the day a change was discussed, you may not find out about it until you did something wrong:

If you weren't on the day that it was learned about, then, somewhere along the line, you will pick it up. Usually because you didn't do it or you didn't do it the way it was supposed to be now. And, just on a daily basis, there seems to be some things that just never get communicated. Part of it is that, if you are really, really busy, running here and there, you may not, shall we say, may not see the person you need to communicate to for a while. When you finally see them, you may have forgotten it. So, some of that is what happens with communication.

Likewise, John perceived that the newsletter and meetings were ineffective methods of communicating changes to the staff nurses. Instead, John perceived that it would be beneficial if nurses could attend inservices, where they would find out about a specific evidence-based-practice change and the reason why the change was occurring. The perceived ineffective communication hindered the nurses' ability to identify what was important:

I would say probably maybe a better form of communication. The hospital does a good job at putting the emailing and putting out a newsletter and stuff like that. I don't think the newsletter is read, especially by me; I don't read it. ... But maybe inservices allowing us off the unit and tell us the things that are new - things evidence-based. Hey, this is what we're gonna do. This is why. ... I mean, don't get me wrong; there's a lot of modalities to get it out there. But I just don't know what's effective. I mean, meetings are effective for a non-clinical person who doesn't have to take patients. But for the people who do take patients, like myself, I can't get away.

Similarly, Francesca perceived that communication of changes was informal; however, she does not say if this form of communication was effective: "Well, our Nurse Leader

will come in, and we'll have a little team thing or whatever. And he'll say, 'Hey, we're down on blah-blah-blah; please make sure that you' - the call light was the big thing." Likewise, Michelle perceived that changes were communicated informally and via the staff meeting. It was unknown if these methods of communication were effective:

He [the Nurse Leader] just talks to us. I don't think there is a specific way. He will talk to us individually or sometimes at meetings, I guess - at staff meetings, which we have every other month. He'll say, "We have x, y, z falls." Actually, that is what happened at the last staff meeting. "We need to increase our call light answering," and, "We need to make sure, if the patient is confused at all, they get a bed alarm." Stuff like that. So, mostly through staff meetings, or he'll stop people - if there are five nurses at a time working. So, on Monday, Tuesday, Wednesday, and Thursday, he'll say, "Okay, this is what happened." He'll, kind of, group us together.

Also, Mary perceived that communication of changes occurred via the staff meeting. It is unknown if or how nurses received information from the staff meeting if they did not attend. Also, it is not known if this method of communication was effective:

There usually are different issues. I think a lot of it, what we talk about, is patient satisfaction; and that is a big deal. And then if there have been any changes on the unit and what those changes are - what needs to be done.

The MJH ICU worked with the assumption that nurses were responsible for reading posted material in the form of memos and education posters and for incorporating this information into their practice and this method of communication was primarily ineffective. For instance, Bob perceived that nurses were informed of evidence-based guidelines via education posters. These posters were posted, and nurses were expected to read them and to incorporate the information into their practice. It is unknown if this method of communication was effective; but the nurses' lack of awareness of changes suggests that it was ineffective:

Bob: That's how they do the continuing education [poster boards] and everything for the unit. ... Information is put on there, guidelines and all of that put on there; and people read them.

Kim: How do you make sure that gets into practice?

Bob: I just think that it is up to the nurses to implement that, but I think that nurses there are good and go by whatever the guidelines are. ... Well, like if someone comes to them and says that trach care causes complications - this is the way it should be done now, I think that the nurses would implement that....

Similarly, Sarah perceived that the primary method of communication in the unit was to post information. Clearly, to Sarah, it was the nurses' responsibility to read and incorporate everything that was posted: "For staffing, we put up a flyer that says anything new that we're making changes to or anything like that. I guess, on the unit we just use a lot of flyers. Flyers go up, and it's your job to read." However, Sarah perceived that the posted memo regarding the improvement plan for the mislabeling of laboratory specimens was initially ineffective. Ineffective communication regarding changes created an environment in which the nurses did not know what was important:

The lab, the label, and not everyone took it seriously. ... This time, one letter was put up, one little thing. You need to put a sign where it is passed. This time, there were lots of little notes kind of all over the place with a stern warning that, if this happens with double signing, that you both are going to be reprimanded for it.

Likewise, Nancy perceived that communication regarding changes occurred via posted memos; and she believed this method was ineffective. Also, Nancy perceived that, in spite of efforts to informally convey changes, she often missed information during her off days. Ineffective communication created an environment in which nurses did not know what was important:

There are post-its around in the unit, and they are a main way to communicate. But you don't always see them. You are not always standing there just reading bulletin boards. I know some things have been posted in the bathroom so that you read it. That's probably the hardest thing about the changes; it's just getting communicated what you're - and then it's how we're doing this procedure or the paperwork - type things. ... Sometimes the communication of it [the change] is hard, because you are in work one day and the next day, oh we're not doing that anymore. While I think that the Team Leaders try really hard to - because I think it is kind of put on them, again, to communicate to us. You can't hit everybody all at once. You can go four or five days without working and then come back in, and they may or may not be there.

Similarly, Ricki perceived that he did not pay much attention to the posted information, unless someone brought it to his attention. The ineffective communication created an

environment in which nurses did not know what was important and did not know enough about the change to form cognitive beliefs. Ricki further alluded that nurses often signed that they had read something when in fact they had not. This was a frequent occurrence in this unit, for it had happened with the laboratory-label improvement plan:

It's bad; because I don't pay too much attention to that, unless it's coming to us, where you need to read this. I don't look for it. I don't look beyond that. ... It's out there. It's said. Education is put on the board. Education has been addressed, because you signed off on it. ... You read it and sign off on it that you've read it. And...PIC line dressings are a good example. ... They put a little board for us. We have to sign off on it saying that we know that this has to be done in so many hours, so many days - the Biopatch, the whole bit. ... And, once again, if you signed off on the education of it, then you acknowledge it. I mean some of us are probably sign for stuff without reading it all, sure. But, if that's the case, then we have to do what we have to do.

The MH MS unit worked with the assumption that nurses were informed of changes primarily through verbal communication with unit leaders and that this was an effective form of communication. The most commonly cited form of communication in the MH MS unit was the "huddle." The "huddle" took place at change of shift. The on-coming nurses "huddled" with the off-going charge nurse. During the "huddle," the charge nurse provided an overview of the unit, which was followed by "huddle talk." The topic of "huddle talk" varied weekly and was determined by the Nurse Manager and the three Clinical Nurse Threes (CN3s), who were considered part of the leadership team. For example, Marcy perceived that "huddle talk" helped inform nurses of upcoming and current changes, expectations, and things that the unit was working on to improve. This flow of information helped define what was important to focus on and allowed the nurses to form cognitive beliefs towards the change. Marcy shared:

We do a huddle at 6:30 in the morning.... Just go over important things to touch base on the unit that we're trying to work on or improve or things that we need to be made aware of. ... This week it's JCAHO; we're big-time focusing on pain and restraints and making sure that people take their breaks during lunch. ... Beacon Phase Two [computerized charting] starts in June [this interview took place early March]. So, they've been trying to explain, little by little, things that are going on with that, as soon as they get information - they being management.

Likewise, Debbie perceived that “huddle talk” provided information to the staff nurses. Information conveyed during “huddle talk” included things that were changing and behavioral expectations, such as proper labeling of laboratory specimens or how to do a “teach back.” This information helped define what was important, what needed to occur, and why it needed to happen:

Debbie: Every morning we start at 6:30 with a huddle. ... But then they also have huddle talk; I think it changes every week. It’s just information that we need to know on what’s going on.

Kim: So that’s where they show you [cut off]

Debbie: The labeling and things like that. Teach back.

Similarly, Mona perceived that the “huddle” provided staff nurses with information regarding changes. This information helped identify what was important to focus on and to improve. The topic remained the same for the week so that information about what was important was conveyed to all nurses:

At work, we come in the shift; we always have what they call a huddle. ... And, at the end of the huddle...for the week, we have a topic, something that needs to be reinforced to everybody. “Okay, now we have to check our surgical patients.” Something like that. It kind of reminds us of things that we usually forget. So, it’s a good thing. And they’ll be doing that the whole week, just to make sure everybody gets it.

The MH ICU operated with the assumption that nurses were informed of changes through multiple communication methods and that these methods were effective.

Communication methods included direct communication from unit leaders, staff meetings, email/voicemail, and via the shared governance councils. For instance, Jill perceived that she learned of changes through her Unit Manager and via the shared governance councils. Jill perceived that these methods of communication were effective:

A lot through our manager. There’s, again, committees that come around. ... Then again, my manager gets reports; and it gets filtered down to us. And so, we’re, I think, kept pretty informed of the results.

Likewise, Yolanda perceived that she found out about changes from the staff meeting.

She perceived that unit-level outcomes were reported in the staff meeting, which created awareness among the nurses to improve:

It's once again noted in the staff meeting; she [Nurse Manager] does that all the time in the staff meeting. There's the outcomes and stuff. There's a big section on that in there to let us know. And, I guess, it's just overall awareness. We should be aware that we're falling behind in this area and to be more cautious and stuff like that.

Similarly, Ethel perceived that communication methods employed in the MH ICU were effective:

We do assessments weekly, surveys, which certain people who are on our shared governance board that does different committees [nurses post information and data from shared governance councils on a board]. ... Oh, voice mail. We have a system of getting information now where we can leave a, what's called, Meridian Mail. It's a voice mail system, and we can log in and hear changes and updates in the work environment from our Manager and from throughout the campus and from the CEO.

Summary of how effectively changes were communicated. Overall, communication methods employed at each hospital were similar. However, communication in the MJH MS unit was perceived to have occurred informally or through staff meetings. These methods of communication were perceived to be inconsistent. The MJH ICU operated with the assumption that it was the responsibility of the nurse to read and incorporate posted information. This assumption puts the responsibility to change behavior and incorporate evidence-based interventions solely on the individual. Prior research suggests that this is not the successful path toward ensuring that current evidence is followed. Relying on the individual to read posted information was primarily perceived to be ineffective. The effectiveness of the communication method influenced the nurses' ability to define what was important, and therefore, their ability to form cognitive beliefs towards the change.

In contrast, the MH MS unit had a unique method of communication, which they called the "huddle." The choice of the word "huddle" was also interesting, in that it

connotes working as a team rather than relying on the individual. The “huddle” was perceived to be an effective means of communication. The MH ICU nurses did not perceive that there was a primary communication method but, instead, that there were multiple communication methods. Overall, MH nurses perceived that communication was effective. Unlike the MJH, no MH nurse shared that they were unaware of changes or of the reasons why the changes were occurring. Effective communication facilitated identification of important changes that were expected to occur. MH nurses perceived that effective communication facilitated their ability to change their practice. Knowing and understanding the change influenced their cognitive beliefs, which in turn influenced their behavior.

How nurses determined what was important to focus on, improve, or change. Each unit in this study used unit-level data, such as nursing-sensitive indicators, to help determine the reality they faced. The collection of nursing-sensitive indicators was required for Magnet hospitals and hospitals that wished to attain Magnet designation. Nursing-sensitive indicators include such things as the fall rate, pressure ulcer prevalence, patient satisfaction, and central line infection rate. Most nursing-sensitive indicators have associated evidence-based prevention interventions. Since these outcomes have associated evidence-based prevention interventions, assessing the importance that the units placed on them provided a window into the importance the unit gave to incorporating evidence-based interventions. Nurses from all units were aware that their unit collected nursing-sensitive-indicator data. However, the significance that these data had in determining what was important differed by unit.

The MJH MS unit operated with the assumption that nurses were aware of nursing-sensitive indicator data but that these data, with the exception of patient satisfaction data, was not central in defining what needed to be improved, changed, or fixed. As mentioned in Chapter Four, nurses had many divergent beliefs regarding EBP.

The combination of nurses' divergent beliefs and the lack of importance given to evidence-based outcomes created an environment in which EBP was invisible. For example, Francesca perceived that nursing-sensitive data were posted on a bulletin board. However, Francesca was not sure what the unit did with the data:

Francesca: Well, they're putting up all these different surveys, all these outcomes. We have a whole board now [new initiative] with all the percentages and outcomes of everything. That people calling, our call lights, our, um, oh gosh, there's just so many things...I can't think of anything. Our Nurse Leader is letting everybody see - we have a whole board just set up for all the different outcomes, percentages, of what we're doing right and what we're not, I guess.

Kim: What do you do with that information - if you're not doing good in one outcome?

Francesca: I guess we have to work on it.

Similarly, Grace shared that nursing-sensitive indicator data were posted on a bulletin board. She, like Francesca, perceived that this information was not very important. Grace perceived that the Nurse Leader would "mention" when a nursing-sensitive indicator needed improvement:

Kim: Have you heard of nursing-sensitive indicators?

Grace: No. What's that?

Kim: Things, such as your fall rate, pressure ulcer prevalence, patient satisfaction, and central line infection rates.

Grace: I never do those.

Kim: How do you get information on those kinds of things?

Grace: They post it.

Kim: What if you have a problem in one of those areas - how do you guys solve it?

Grace: I'm not sure; I know that our Nurse Leader will mention when it's going over and its bad and when you have to work on this.

Likewise, Mary perceived that nursing-sensitive indicator data were posted on a bulletin board, but she did not "pay much attention to them." Mary shared that the nursing-

sensitive indicator data were not discussed, unless they were “low;” and then the Nurse Leader would mention this. However, Mary perceived that nurses found out about patient satisfaction in a timely manner:

I think it’s every month there is some information that is hung up on our unit that we can actually see. And they do trends with that data, and it is trended against other units - and we can see how we are doing as far as the whole hospital, how the other floors are doing. ... Well, if you watch those, you look at those - most of the time, I guess, I don’t pay that much attention to them, unless they are really good or really bad. But we are, I guess, in the middle. When they drop low, that’s when they are brought up. They are spoken about at the unit meetings. ...

Well, I think that they’ll really recognize you, especially if patients and families compliment you. They say, “Oh, we really are happy with our nurse today.” That’ll almost always come back to us. ... Well...they walk around the units and they interview patients; they interview families; and they find out how we are doing, how the unit is doing, and how nurses are doing. How their stay is - are they happy, are they dissatisfied? And then they ask them ways we can improve. ... And then you also hear if anything bad has been said about you, too. That is when you will hear it right away, if a patient has a complaint or a family member has a complaint.

The MJH ICU operated with the assumption that nurses were aware of nursing-sensitive indicator data but that these data were not central in defining what needed to be improved, changed, or fixed. As previously mentioned, EBP was more apparent in this unit than in the MJH MS unit; but the lack of focus on nursing evidence-based outcomes made using evidence in practice more difficult. For instance, Tom perceived that nursing-sensitive indicator data were available but that nurses did not pay attention to this information: “We do have that information, actually; but I never see those to be totally honest with you. I don’t think they’re ever really presented at the Staff Meetings. I don’t know that we actually follow that very much.” Likewise, Sarah shared that nurses were informed of nursing-sensitive indicator data and infection-control data. However, these data were presented in a “general” email and were not deemed important to focus on:

Well they send that kind of through the email, just sort of in general - what’s going on. I wouldn’t really say who’s compliant, who’s not compliant, or whatever. Just in general - we get most, I would say, what we get the most of is the other

thing that is tracked, like through Infection Control and lab, is contamination of blood cultures. So, we get a lot of that feedback from Infection Control.

Similarly, Tracy perceived that nursing-sensitive indicator data were posted and available for anyone to look at. However, Tracy perceived that nursing-sensitive indicator data were not a focus of the unit. The lack of focus on evidence-based nursing outcomes helped define the perception that EBP was somewhat invisible on the unit and not something they engaged in:

Tracy: I don't know exactly when it comes out, but I've seen them posted. There's a packet of everything in, like, the trend.

Kim: Do people read them?

Tracy: I look at it. But I can't tell you what the last one said or anything. I'll look to see what percentages are and stuff. But I think people must. I don't know. It's not, like, forced – like, hey, check out the latest. But they don't really push it. But, if you want to know it, you can know it.

Also, Ricki perceived that nurses were aware of nursing-sensitive indicator data. He also admitted that he did not “pay attention to the numbers game” or how a problem was fixed:

It almost goes hand-in-hand with the satisfaction surveys that we do, too; because we get wind from that. It's from the Director; she likes to come to us with that and with the Team Leader at staff meetings. They'll tell us what certain numbers are. It's usually the bad numbers, because then how do you improve it? ... I really don't know exactly what they do, because I don't pay attention to the numbers game really. Because, you're right; the things that you said are kind of the things we look at.

The MH MS unit operated with the assumption that nurses were aware of nursing-sensitive indicator data and that these data were central in defining what needed to be changed, fixed, or improved. Each nursing unit in the MH had a “Team Map.” The “Team Map” incorporated annual unit and hospital goals, nursing-sensitive indicator data, improvement-project data, and shared governance council data to mention a few. All this information was posted on a bulletin board.

The “Team Map” data were reported from the unit level to the hospital level through their shared governance councils. The “Team Map” data were also discussed at various unit-level meetings and councils. Every staff member was expected to be a member of a team from the “Team Map” and to participate by collecting data. For example, Marcy shared that she oversaw a “Team Map” which collected data on discharge education and patient readmission rates. This “Team Map” assessed the effectiveness of the evidence-based BOOST improvement project. The involvement of nurses in the data collection, the posting of the data, and the discussion of the data clearly defined what was important for the unit to improve. This clarity, in turn, influenced nurses’ cognitive beliefs and behavior:

Team Map...we have a lot of on this board that’s over here, a lot of just different areas. Mine is better education for discharge of medications - that kind of thing, because I was on the BOOST project. So, I’m one of the leaders on that. And, basically, we build up a data-collecting sheet of making sure - and we have nurses there who collect the data for us. And then we review everything; there are two of us, a CN3 [Clinical Nurse Level 3] and myself who collect the data and actually look over it and see if, for this person, discharge medication education was done, patient wasn’t readmitted, or things like that. We just collect the data, go over it, and then bring it all to our Nurse Manager. She puts it all together and discusses it in a team meeting; we do it quarterly.

Likewise, Paige perceived that the “Team Map” facilitated nurse involvement in data collection. The involvement of the nurse, along with the posting and discussion of evidence-based outcomes, influenced nurses’ cognitive beliefs and behavior:

Each employee on the unit is assigned to a different council. Each council has a chairman, and the chairman has different employees under them to help data collecting. Say I am team leader with Sharon. Sharon and I are team leaders for - I think pain reassessment, and then you have five nurses under you and we have to create a data collection tool. So you say, “Well, Mary Jane, Sue, and Anne, we are going to do data collecting; and this is your data-collecting tool. Now, I want you to see five patients every month, write down the answers to these questions, and then put them on my clipboard.” Then I calculate it, and then - I think it’s once a quarter - our councils meet. And then I give them the data-collection information. ... And JCAHO is coming, so you have these indicators to make sure that you are being compliant. So, that’s also important. When JCAHO comes, you are already doing the Team Map for some things that they will be looking at.

Similarly, Cathy perceived that nurses were involved in collecting unit-level evidence-based outcome data. The involvement of nurses in data collection and their awareness of the findings helped the group focus on what was important, the use of evidence-based interventions:

Cathy: We actually have different groups that we're assigned with the management or the CN3; we have groups that we work on different goals every year. ... So, there's a group of people that are making sure that people do, you know; so we check our peers for things like that [hourly rounds] or the hand washing.

Kim: So you audit each other?

Cathy: Yeah, yeah. And it's a group that you do. And it's part of your program that you do every year. And you can change; we change that every year. The one that I'm on is the one where we do two callbacks [to discharged patients]. We help the Patient Care Leaders do two callbacks every month. So, that's a group of people. And then there's another one that they're supposed to watch and make sure people are doing hand washing.

The MH ICU operated with the same assumption as the MH MS unit: nurses were aware of nursing-sensitive indicator data; and these data were central in defining what needed to be changed, fixed, or improved. Like the MH MS unit, the MH ICU had a "Team Map" and followed the same process. This process defined what was important for the unit to improve, change, or fix. For instance, Yolanda perceived that the "Team Map" and posted data identified what was important for the nurses to focus on and improve:

Yolanda: Team Map...it's literally what are we working on now to try to make our unit better. What we are working on now to improve such and such or with the ventilator, all the little - what am I trying to say? That the - against pneumonia. What am I trying to think of?

Kim: VAP?

Yolanda: Yeah, and things like that. So, I think that they are constantly working on that on a continuous basis - always posting up the different things that we're doing. ... Different, different, um, Heavens to Betsy - studies that they do and how it compares this year to last year, whether it be a budget thing, or whether it be how many people - just little different studies that they do. They're constantly posting notes so we can read about those and try to improve.

Similarly, Greta perceived that, through their shared governance councils, which fall under their “Team Map,” staff nurses collected data on various evidence-based and non-evidence-based interventions. For example, nurses observed other nurses, techs, therapists, or physicians to see if they follow the evidence-based hand-washing guidelines. If the data-collecting nurse observed a person not following the guideline, he or she would tell him or her in real time. The frequent data collection by staff nurses and the real-time feedback helped to define what was important on the unit:

By doing the pay for skills at the same time, incorporating it with what we call shared governance and so there's Councils. And, on each Council, there's a Chairperson. ... So each of those Councils, they're doing audits; and we're looking for the JCAHO, like hand washing - and even by making sure that they are doing those audits. And, at the same time, we are educating them, “That you need to be doing this;” because that's what you're checking. That's what we're looking for.

Likewise, Ethel perceived that there were annual goals that the unit strived to achieve. These goals related to items, which fall under the “Team Map” and the shared governance councils. An example of an annual goal would be hand washing. Through the “Team Map” and shared governance councils, nurses collected data on hand washing and other topics. Having nurses participate in data collection and having data readily available helped define what was important:

Ethel: There are goals that we set every year for our employees to strive to improve. So, we do assessments, weekly surveys, which certain people that are on our shared governance board that does different committees. One committee is Infectious Disease, and we assess hand washing to make sure people are washing their hands before and after care, even before entering a patient environment. So, they put the hand sanitizer outside of every room, and they're going to be instituting a new initiative for the family members that are coming in: don't cross the red line without washing your hands. So that's hand washing. Anyhow, part of our Team Map is hand washing, so we have surveyed to make sure that people are washing hands.

Kim: Do you ask staff if they are washing their hands?

Ethel: No, we watch them. And, it's staff watching staff.

Summary of how determined what was important to focus on, improve, or change. The role that data played in defining what was important to improve, fix, or change varied by hospital. For the most part, nurses from all units were aware of evidence-based outcome data, such as nursing-sensitive indicators. However, the nurses from the MJH perceived that these data were not central in defining what was important to focus on, improve, or change. EBP was fairly invisible in this hospital, and the nurses' lack of focus on evidence-based outcomes further increased its invisibility. The lack of focus on evidence-based outcomes further created an environment in which it was harder to use evidence in practice, because it was not deemed important.

In contrast, the MH units were data-centric. Evidence-based outcome data were central in identifying what was important to focus on, improve, or change. Through the "Team Map" and the shared governance structure, nurses were involved in data collection and discussion of evidence-based outcomes. Nurses in these units understood the importance of incorporating evidence-based interventions into their care and consistently strived to improve their outcomes.

Cultural Dimension: The Nature of Human Activity

The nature of human activity incorporates a set of basic assumptions "that define what is the right thing...to do" (Schein, 2004, pg. 138). According to Schein, basic assumptions attributed to the nature of human activity have to do with the organization's "primary tasks, core mission, or basic functions" (pg. 177). These assumptions define the appropriate actions, which people are to engage in. Basic assumptions that each unit functioned under related to these attributes: (a) following standards and expectations and (b) nurses' ability to create change. The basic assumptions about these two attributes of the nature of human activity influenced the nurses' cognitive beliefs and their use of evidence in their practice.

Following standards and expectations. The MJH MS unit operated with the basic assumption that it was okay for nurses to inconsistently follow standards of care and/or expectations. This assumption influenced nurses' cognitive beliefs regarding their not knowing where to find evidence, lack of supplies, and that they did not perceive that following the evidence was something that they did. For example, Cindy perceived that nurses did not consistently follow the standards of care when taking care of patients that were receiving continuous intravenous cardiac medications:

I was always taught that, from the beginning, any patient who is on any kind of cardiac drip their vital signs have to be monitored every 2 hours and every 30 minutes if we are titrating it. If they are stable on their drip, then it is every 2 hours. But you still don't see that happening.

Likewise, Grace perceived that nurses did not follow the Insulin administration protocol. This protocol required two nurses to verify that the correct Insulin dose was drawn up in a syringe. Then, both nurses were to sign the Medication Administration Record (MAR). This procedure was similar to the one employed in the MJH ICU to correct the mislabeled laboratory specimens. MJH MS unit nurses' cognitive beliefs towards the Insulin protocol paralleled their cognitive beliefs towards Hourly Rounds and the MJH ICU nurses' cognitive beliefs towards the mislabeling improvement plan. Specifically, nurses did not believe that the Insulin procedure worked (behavioral belief), it was bothersome for the nurse to do (behavioral belief), and it took more of their time, which they perceived to be in short supply (control belief). Consequently, nurses' behavior did not change to incorporate this expectation. Also, there was lax enforcement of this procedure until a sentinel event happened:

Grace: Oh, when I came in...about two weeks ago and they're, "I just have to review this with you, the chart says this and you have to make sure somebody signs when you give Insulin." I'm like okay - somebody gave the wrong insulin recently - huh? "I'm giving two units of insulin can you please sign for me."

Kim: Did you guys just start that?

Grace: Its protocol - it's been there, but we never do it. It's like you have to hunt somebody - look at what I'm doing. If they're all in the med room, it's easy; you put your paper there, look what I'm drawing up, and sign here. Or then it eases into this [holding syringe in hand at distance from other nurse] "Two units of Novolog - do you see it?" Yeah, okay and then you walk away. No signatures, but you had somebody double-check.

Kim: So you guys got kind of lax?

Grace: Right...and then when you get back to it, I think we learned enough to know; somebody has given the wrong insulin or something. So, we're back to that, it's funny; it all goes back to documentation.

Similarly, Silvia perceived that the evidence-based falls prevention interventions were not always followed. Inconsistently following standards of care and lax enforcement of standards reinforced nurses' cognitive beliefs that they were too busy (control belief), had older equipment that required them to take an extra step (control belief), and not believing that the interventions yielded good outcomes (behavioral belief). Consequently, they did not consistently change their behavior to incorporate evidence-based interventions:

We have a strip that fits under the sheet on a bed and it's like a bed alarm. The beds don't have the exit alarm like I'm used to. ... And you try to put them close to the nurses' station so everybody can hear it when you have a bed alarm. But that's not always the case. ... One time, the night shift nurses medicated her [the patient] with Ativan. I had been taking care of her for two days. She was confused as heck but she was steady on her feet. So she could do anything, she could walk to the bathroom, get out of bed. They put all four-side rails up and gave her Ativan. So, I was watching for her to wake up, but there was no bed alarm on her. So, I was just not lucky, she climbed out of the bed, over the bed rail onto the floor with her glasses on and she got a cut on her eye. Her glasses were all bent up, not busted, but bent. She didn't hurt herself otherwise, thank goodness, but the cut was bad enough. Didn't need a stitch but it was bad enough. And so I got the bed alarm and put it on her; because it was one of those days when you had no time to get anything done and you were just rushing from one thing to another, to prevent any further falls. But I thought, it was just so classic, you know, medicate her with Ativan so that she didn't know where she was when she woke up - she didn't know who she was anyway. But the day before she could go to the bathroom with no problem because the side rails weren't up. I could have let the side rails down because I did notice that the four rails were up and thought, "this will never do." But I didn't stop and do it. So, I decided, after that, I'm not having a confused patient without exit on them, bed exit, because I just don't trust them.

Interestingly, Silvia previously worked at a Magnet designated hospital. She perceived that the Magnet hospital had “laws” that everyone followed, no matter what. She perceived that this was in sharp contrast to the hospital that she currently worked at:

That hospital [Magnet hospital] was just an amazing place. Everything about it was amazing; it was very good. ... But...there were laws at this hospital that things were done this way, and this is the way they were done, and there was no question. ... Like taking your patient to a cardiac cath - if they were telemetry monitored, they had to go on a monitor with a nurse to the cath lab. ... But that never varied, nobody sent their patient without that. Nobody got to do that.

The MJH ICU also operated with the assumption that it was okay for nurses to inconsistently follow standards of care and/or expectations. This assumption influenced nurses’ cognitive beliefs and behavior. MJH ICU nurses believed that evidence was found in written care documents but EBP was not perceived to be something that they did. For example, Ricki perceived that a certain medication was not routinely administered the way in which evidence suggested was the best method. Nurses believed that following evidence was good, but they did not see it as something that they actively did in their unit:

I think one of the nephrologists said to me the other day...something is better given IV, PO, or sub-q. I think it’s Vitamin K, just as an example, I can’t remember. So of course, we give everything subcutaneous. That may be so, but evidence shows that it’s better this way - oh, PO, if you could take it.

Also, Nancy perceived that nurses did not follow the expectation that nurses engage in bedside change-of-shift report. The assumption that standards and expectations were inconsistently followed influenced nurses’ cognitive beliefs in that they believed bedside rounds improved patient care (behavioral belief); however, this was over shadowed by the nurses’ behavioral belief that bedside rounds were not beneficial for them:

It [bedside rounds] should have been done for a long time; ever since I have been in there. I mean that has been the expectation.... I know that it is hard sometimes, because everyone wants to sit at the desk and just chit chat and just go over report that way, but it does work better if you go in and look at the patient together.

Similarly, Dawn perceived that sometimes patients were not fed in a timely manner.

Early feeding of intensive care patients is a widely recognized evidence-based prevention intervention. However, according to Dawn, it may take “four days” before patients are fed. The assumption that standards were inconsistently followed influenced nurses’ cognitive beliefs. Even though nurses believed the outcome was positive for the patient (behavioral belief) changing their behavior to incorporate evidence in their practice did not occur because “things got crazy” (control belief):

Well, something as simple as feeding. Sometimes we overlook that. It's day four of the patient's stay here and they're intubated and I'm like, we need to ask nutrition or we need to extubate this patient and feed them. Or we're gonna put a feeding tube in and start feeding them because sometimes that gets overlooked. You're thinking about keeping this patient alive, and the pulmonary status, and the antibiotics. You kind of forget the food part of it. So sometimes, we'll just address that with the doctors. ... So, things like that; nothing grossly negligent, but small things like feeding and things. ... We don't forget too often. We have a nutrition therapist that comes around and see the patients every day we do rounds. So, except for the weekends, we do rounds every day. So typically, everything's addressed. If it's a weekend, sometimes things get crazy. We'll kind of let that slide a little bit.

Also, Wilma perceived that at the unit-level, protocols were inconsistently followed and enforced. Interestingly, Wilma also perceived that hospital administrators told surveyors that “we always did this” even though nurses knew that they did not follow the standard. The hospital-level behavior paralleled unit-level behavior where MJH MS unit nurses signed that they did Hourly Rounds when they did not and when MJH ICU nurses signed the laboratory label when they did not verify the information. It appears that the unit- and hospital-level operated with the assumption that nurses inconsistently followed standards and/or expectations. This assumption influenced nurses’ cognitive beliefs and behavior:

They have the rules. They have protocols, but they weren't enforced or incorporated. Nobody was - unless it really came down to now we have some sentinel event. And they've had a couple of those. Every hospital has some. ... So, absolutely a lot of stuff is not enforced. Yes, they're on paper. ... But, yeah, there are a lot of things that are very lax, very lax. And then they start enforcing it

as soon as they think they're having a survey - and then they'll start, "Well, we always did this."

The MH MS unit functioned with the assumption that nurses consistently followed standards of care and expectations. This expectation was perceived to come from the unit- and hospital-levels and in turn, influenced nurses' cognitive beliefs and behavior. Given the global nature of this basic assumption, nurses also perceived that all caregivers followed expectations and standards and not just nurses on the unit. As previously mentioned, nurses from this unit perceived that they used evidence in their practice, and the use of evidence improved patient outcomes (behavioral belief). Also, they perceived that evidence was embedded in their written care documents, which they used when deciding how to care for a particular patient (control beliefs). Following standards of care and expectations was perceived to be an expected behavior. For example, Barb perceived that the expectation to follow standards and/or expectations occurred at the hospital- and unit-level. Consequently, nurses used evidence-based clinical standards to guide the care that they provided:

We know what to do because the hospital has a standard. You're supposed to follow their rules. And we do. ... We have our stuff and that's what I; it's my job to follow their rules. ... Or, you get online and you; we have a prisoner situation. You have things you don't deal with very often and we'll go online, get the policy and procedure, and print it out. Then there are all our clinical standards that you follow. And you put it on the chart and you follow it.

Likewise, Debbie perceived that the expectation to follow standards and/or expectations occurred at the hospital- and unit-level and this expectation applied to all caregivers.

Debbie believed that doing what was best and right was beneficial:

Debbie: But I think most of the time people are at least trying for that. It may not end up that way, but people - between physicians and nurses, everybody's trying to get the best for the patient.

Kim: Do you think that's a value in your hospital that you do what is best and right for the patient?

Debbie: Yeah. Especially the higher-ups, but I think everybody feels that way. I think you have to, to be in healthcare. If you don't feel that way, then you shouldn't be here.

Also, Marcy perceived that the hospital and unit operated with the assumption that all caregivers were expected to follow the standards of care. Failure to follow the standards resulted in the perception of "getting in trouble." Unlike the MJH, some type of intervention occurred when the recommended evidence-based standards were not followed:

Kim: Do you think people follow the standards here?

Marcy: Yeah, I think we have to for the most part.

Kim: Who says you have to?

Marcy: Oh well everybody, I mean the whole organization.

Kim: It's in your culture?

Marcy: Yeah. I mean if you don't follow the standards of care that 's when you get in trouble. Yeah.

The MH ICU operated with the same assumption as the MH MS unit: nurses consistently followed standards of care and expectations. Like their MH MS unit counterparts, MH ICU nurses perceived that this assumption occurred at the unit- and hospital-level and applied to all caregivers. This assumption influenced nurses' cognitive beliefs and behaviors. As previously mentioned, MH ICU nurses perceived that their care incorporated evidence and they believed this was beneficial for the patient/family. Nurses also used evidence-based care documents when deciding what to do for a patient/family. Also, they believed that there was an expectation to follow standards and do what was "best and right for the patient/family." For instance, Angela perceived that following evidence-based standards of care was "in the culture" and expected of every caregiver. Angela believed that following the standards was beneficial (behavioral belief):

Gosh, I don't know four or five years ago [when they started using EBP]; it seems like it's been a while. Yeah, it's pretty much in the culture – that's the way the hospital does that. Yeah. They say that the hospital is - I want to say they're very anal and it's good in some ways, it really is good because everybody has to do A, B, and C. And I like that - I like an organization that is very set and strict in their ways, because I have actually done pool just to pick up extra hours at different hospitals and they weren't like that. And I found it to be - I just didn't feel safe.

Similarly, Jill perceived that all caregivers are expected to follow evidence-based standards of care; and this happens at the unit- and hospital-level:

I think they're [physicians] held accountable to our hospital standards just like everybody else is.... I think they're held to a lot of the same standards that we are at the same time, which is the way it should be.

Jill continued that doing what was best and right for the patient/family was “in the culture.” This was a core assumption that transcended individual work groups at the MH.

Jill perceived that with or without Magnet designation, the MH would be committed to using evidence and doing what was right for the patient/family:

I don't see a lot of impact that it did to us because I think we - and the biggest reason, my understanding, why they went for the Magnet status was because we did everything right. As a hospital, as an organization, that is their culture, that's their belief, and that's something they've worked on for years and years and years. And I think the Magnet status just was a no brainier. I think it was a matter of just paperwork, just crossing the t's and dotting the i's and just proving it. ... I think Magnet or not, our hospital is very committed to doing the right thing and I think it's just a physical - it's just proof.

Likewise, Betty perceived that following evidence-based standards was the only way that caregivers could practice at the MH. This basic assumption influenced nurses' cognitive beliefs and consequently their behavior because they used evidence in their practice:

Right, you cannot – not do it. You know, the chlorhexadine is on the med sheet, right there. It's not like you're going to – “oh yeah, I forgot to do that.” But yeah, it's on there. There is the expectation that you practice this way. We all know what we need to do. Yeah, it's not even a choice; it's the way it's done.

Summary of following standards and expectations. There was great contrast between the two hospitals in regards to their respective assumptions about following evidence-based standards and/or expectations. In the MJH units, it was okay for the nurses to inconsistently follow standards and/or expectations. This basic assumption

influenced nurses' cognitive beliefs and behaviors. Specific examples of this assumption would be the influence this assumption had on nurses' cognitive beliefs and behavior concerning Hourly Rounds and the laboratory mislabeling improvement plan. Since following standards and expectations were perceived to be optional, nurses did not believe they were compelled to consistently do what was expected but to say that they did. Ironically, the hospital did the exact same thing when they underwent surveys by outside agencies. Interestingly, enforcement of many standards occurred after a sentinel event.

On the contrary, the MH units operated with the assumption that evidence-based standards and expectations were consistently followed by all caregivers. This expectation was perceived to transcend all levels of the organization and influenced all caregiver's beliefs and behaviors. It was expected that everyone did what was best and right for the patient/family.

Nurses' ability to create change. The ability to change plays a central role in EBP adoption and maintenance. Accordingly, it was important to identify the basic assumptions that influenced the change process because these basic assumptions influenced nurses' cognitive beliefs and behavior. The MJH MS unit operated with the assumption that nurses were not empowered to create change. Several factors influenced their ability to create change and they included: (a) nurse leaders who were unreceptive to nurses' opinions/input, (b) nurse leaders who did not take any action concerning nurses' opinions/input, and (c) nurses stopped voicing their opinions/input because nothing changed and they were labeled as "complainers." The majority of nurses from the MJH MS unit perceived that unit leaders were unreceptive to their opinions/input. For example, Mary perceived that nurse leaders were unreceptive to and did not seek out nurses' opinions/input to find out what needed to be changed or improved. Also, nurses were not involved in the change process. Nurse leaders who did

not seek out and/or listen to nurses' opinion/input created an environment in which nurses did not believe that they could create change; they perceived that they were not empowered to do so. This environment influenced nurses' cognitive beliefs because they did not perceive that it was beneficial to speak up to improve the outcome of the proposed change. Consequently, nurses did not embrace change of any type:

I, honestly, just don't even know; I have no idea because I am not a part of the process that does the changes. So, I don't know. One of the things I have always said was, committees from nurses from the floors and keep it simple. They call in all these groups of people that are outside agencies. And they are doing surveys and it's, like, Oh my God, why don't you just grab nurses off the floor and have committees of nurses; get their suggestions, actually listen to their suggestions. Maybe you'll get something accomplished and quicker, too, and it won't be so costly. I mean, that is so simple - why is it so difficult? I don't know. Because, that is their way and they have their committees and they have outside agencies and I think that that is it. [Mary, MJH MS unit]

Similarly, Michelle perceived that certain types of patient/families did not like the frequent interruptions that Hourly Rounds provided. Based on this patient/family feedback, nurses wanted to change Hourly Round expectations to reflect this patient/family concern. So, nurses brought their concerns to unit leaders. However, unit leaders were unreceptive to the nurses' input because they believed there was improvement since Hourly Rounds were implemented. Unit leaders instructed the nurses to just complete Hourly Rounds as they had been proposed. This created an environment in which nurses did not perceive that they were empowered to affect the outcome of the change to make it more beneficial for the patient/family or to incorporate patient/family preferences into their care. Their lack of empowerment and involvement influenced their cognitive beliefs and behavior. Recall that nurses from this unit perceived that Hourly Rounds were not beneficial for the patient/family and/or them (behavioral beliefs), they took more time (control belief), and consequently, most nurses did not change their behavior to comply with this expectation. Also, involving the patient/family in care decisions was not on the nurses' radar in this unit. Additionally, recall that data did not play a central role in

determining what were important to improve in this unit. Nurse leaders who were unreceptive to nurses' input concerning patient/family concerns reinforced this behavior:

Michelle: I think that patients feel like you care. But I also think that patients think it's annoying at times especially those alert and oriented patients. They're like, "Just leave me alone." ...

Kim: Did you bring your concerns to your Nurse Leader?

Michelle: Yeah.

Kim: How did that go?

Michelle: Well, we said that it was silly. ... And, if the patient is sleeping and you are bothering them by going in their room. Day shift is a little bit more different; but night shift - to have to go in there and it's pitch black. Those are concerns that we have expressed; but people – no, they said, it needs to be done.

Kim: So, there really was no discussion?

Michelle: Yeah. Apparently, it was from our Nurse Leader, the Clinical Nurse Coordinator, and our Nurse Manager have told us that once we started the hourly rounding, it was approved and improved everything immensely. So, I guess you can't deny that it's working. So, just do it.

Likewise, John perceived that nurse leaders were unreceptive to and did not seek out nurses' opinions/input to find out what needed to be changed or improved. John believed that for a staff nurse to be able to propose an evidence-based change, the "non-clinical staff" needed to become more receptive to their opinions/input and to take action on what the nurse presented. Nurse leaders who were unreceptive created an environment in which nurses were not empowered to create change because they were unable to bring forth ideas or suggestions to change practice. The power to create change in this unit clearly resided with administration. This influenced nurses' cognitive beliefs and behavior:

John: A more inviting - something to where if I say that, if I want to bring something in I can.... ... A little more receptiveness.

Kim: On the part of?

John: Non-clinical staff. So it's one of those things where I know now, if you have an idea, it's suggested that you take it to the council and let it be reviewed.... ...

Just being a little more inviting and receptive towards people's ideas and stuff and not necessarily shooting things down, if you will.

Kim: Who shoots things down?

John: I guess right now the dynamic of the hospital is more of it'd be an upside down triangle versus the other way around. And I guess that they made it to be where we felt like what we were suggesting if...we actually brought in an article, that we would be listened to and not just kind of written off as not being someone of an expert or anything of that nature. So, I guess if we felt like the environment was more inviting, more that they were actually gonna listen to us. And not just say, "Oh, okay we'll take it into consideration" and then put it aside type of thing. I would say that. I would say that would be the biggest one. Just show me that you're going to listen to me, type of thing, and then just act on it. That would be it for me.

The second factor that influenced MJH MS unit nurses' ability to create change was that no action was taken regarding their suggestions for change. For instance, Francesca believed that nurses could make suggestions but those suggestions were not heeded. This created an environment in which nurses could not create change:

Francesca: I'm always saying we've got to start a union. ... I don't think that happens in our unit. I don't think we have a voice at all. Even though they might say that we do, but we don't.

Kim: What makes you say that?

Francesca: People complain all the time. But the same thing - nothing ever changes. Yeah, if they really hear you, they'd say, yeah, we need to fix this.

Likewise, Chris perceived that nurse leaders heard what nurses had to say, but nothing was done with this information:

If there is a meeting and you bring up something - there are three different responses. One is just pass on to another subject, never reply. One is to indicate how that is inappropriate. And, the third is to say boy, that is really a good idea and then nothing happens.

Chris provided a specific example in which he made a suggested change but was unable to create the change. Recently, the Transitional Care Unit (TCU) opened and MJH MS unit nurses helped staff this unit. However, their badge did not open the door to the TCU. Chris suggested that the nurses' badges be programmed to open the TCU door. The Nurse Leader told Chris that was a good idea but three months later, their

badges still did not open the door. This change was perceived to be beneficial for the nurse and perhaps, beneficial for the patient/family (behavioral beliefs). However, the lack of action created an environment in which change was not perceived to be beneficial because it was difficult to happen:

When they first opened up the Transitional Care Unit [TCU], the MS unit seemed to be where most of the nurses were coming from to staff it. So, we'd float there for a day. I floated there, and you have to have a badge to get in, but my badge doesn't open up the door to get in, okay. So, if you leave; like if you need to send the lab work down to the lab, you have to leave the unit to go to the tube system. But, your badge won't get you back in. So, I brought up at the staff meeting that if we are going to be staffing TCU shouldn't our badge be okay to get in there. He [Nurse Leader] said that was a wonderful idea. Okay, it has been three months and my badge still doesn't work to get into TCU.

Similarly, Silvia perceived that she could suggest documentation changes, but she could not create the necessary changes needed to improve the documentation. Being heard but not responded to created an environment in which nurses could not create change to improve their environment. They were not empowered to do so. This influenced nurses' cognitive beliefs and behavior:

Silvia: The charge nurse told me the other day, "I'm really glad you spoke up about that." I think it was the ten papers for Cardiac Cath. She said we needed to talk to them about that, we needed to fix that - who else asked me, too? Oh, Ruth...and she said, "So did they talk about those ten papers? Like, to try to change it?" And I said, "Oh, no! They just talked about what we have to do about those ten papers. How we have to complete them." So, it's not like you can say, look, we put this here, we put this there. Why do we have to put this here? Why do we have to do this again? I couldn't change anything that day, I couldn't make any difference, that's the way it was to be done - I just had to learn the way it had to be done.

Kim: How does that make you guys feel?

Silvia: Powerless. Without autonomy, like you have no brain in your head to figure things out and how to make it better. ... Now some places you are heard and even if things aren't changed, at least somebody listens, and that's how I feel about this hospital. They'll listen to what you have to say, they may not change anything, but they'll listen to you anyway. I read a fascinating study one time...and it was if you just ask the people that are doing it, in any job, in any spot of the United States, the people that are doing it know how to do it better. You just have to ask. I just thought that's just a world of sense there.

The third factor, which contributed to nurses' inability to create change, was that nurses stopped voicing their opinions/input because they perceived that nothing happened when they did or they were labeled as "complainers." For example, recently the unit hired a Team Leader and the Nurse Leader informed the nurses that they would be involved in interviewing and deciding who would get the position. However, the new Team Leader was interviewed and hired without staff input. When asked if nurses brought their concerns about this to the Nurse Leader, Mary perceived that this was not beneficial because all it got you was the "complainer" label. The continued unreceptiveness of nurse leaders coupled with their inaction created an environment in which nurses did not believe they could create change. This environment influenced nurses' cognitive beliefs because they did not see the benefit in bringing forth issues because nothing changed, so they stopped speaking up:

Mary: I think people just feel like they can't do anything about it.

Kim: So, you don't speak up?

Mary: It is a lost cause. I do, but it doesn't get you anywhere. As a matter of fact, it gets you tagged as a complainer.

Kim: So, are you tagged as a complainer? ...

Mary: I think, in general. I do. I think, we should be allowed to speak up without any repercussions. But, that is just the way it goes. And a lot of people just accept it, or don't see it, or ignore it. And some of us see it, complained, and found that it doesn't do any good to complain. So we just, kind of, well, I'm leaving. That is why I don't want to stay there anymore. I don't want that anymore. I don't want to see it and then somebody tell me, oh, that is not really the way it is. Because you could see, obviously, that that is the way it is. Other people have left...that's part of the reason why people leave, is because you feel like you are not being heard. You feel like it's just being shove down your throat - whatever decisions are being made are just being made without your say so. That is what you feel like, you don't have a say so in it.

Likewise, Chris perceived that nurses stopped bringing forth their opinions/input due to nurse leaders' unreceptiveness and inaction. This influenced the MJH MS nurses'

cognitive beliefs and behavior because they did not believe that change was beneficial and it was difficult to achieve:

Chris: It ends up being after awhile that when you realize that it is not going to go your way you just don't speak. So, that when something gets brought up you realize nothing is going to happen anyway. ...

Kim: What do you guys do when you bring it up to your unit manager and nothing seems to happen?

Chris: Ah, it's, ah, how can I say it. It's more like, well that is the way it is. It's not surprising that's the way it is; that it doesn't get solved. It just carries on.

Similarly, Jennifer perceived that she was labeled a "complainer" because she was the "only one" who complained about patient assignments. Even though Jennifer voiced her concerns about a patient assignment, she could not create the change she believed would be beneficial for the patient/families. Also, Jennifer believed that other staff nurses did not agree with how the assignments were made, but they decided not to say anything. The nurse leaders' unreceptivity and inaction, created an environment in which nurses perceived that they were not empowered to create change. Consequently, nurses stopped voicing their opinions and/or providing input:

Actually, recently I was told, by the charge nurse, you're the only one to complain. ... But it was a done deal because it was done by the night shift - when you come in your assignment is already done. But I said, "I have a patient that is on Amiodarone drip and I have a patient that's high fall risk. And yesterday the whole floor, the whole staff was participating in keeping her safe. ... So why are you putting this patient on the split? I mean, I have 2 patients here and I cannot see that other patient and I shouldn't be that far away from her." So, that was my complaint. So I was told that the unit never complains.... But why don't you guys complain? Do you think it's right? "No, I don't like it at all." So, this passivity kills me, this passive approach - they just take it - it kills me - drains me. Because I don't want to be put, in this position later again, and being the only one who complains.

The MJH ICU operated with the assumption that nurses could inconsistently create change. Several factors influenced their ability to create change and they included: (a) nurse leaders who were receptive to nurses' opinions/input but did or did not take any action concerning nurses' opinions/input, (b) nurses did not voice their

opinion/input because they were afraid of repercussions, and (c) shared governance councils were not a mechanism to create change. The majority of nurses from the MJH ICU perceived that their nurse leaders were receptive to their opinions/feedback, however, perceptions varied if anything happened with their suggestions. For example, Jean perceived that the Nurse Manager listened to her concerns about another employee and took action to correct the situation. For Jean, this influenced her belief that she could create change by telling her Nurse Manager her concerns and she would take care of them and this, for Jean, was beneficial:

Jean: And like I said, she really listens to the nurses, not only to me but anytime I have come up to her to say anything, she would listen. I like that a lot about her. ... She is a very, very good manager and I have seen her with other people and anything that I need, I go up to her, and she takes care of it.

Kim: Do you have an example of that - what you might have needed?

Jean: Ah, let's see, what did I want, what did I need? There was a situation once, with another lady from a different department, kept bothering me a lot. I waited for it to happen three times. And I said, well I am not going to say or do anything until the third time. She [Nurse Manager] was like, "Give me her name. I'll fix it. Just, tell me who it is. And I don't want you to have to feel like there are any problems here while you are at work." And she did. So, she is always willing to fix and make you happy, like, "I want you to work here. I want you to be here and I want you to be happy."

Jean also perceived that the Nurse Manager took action to change things without nurses' input and this was also beneficial for her:

She [Nurse Manager], ever since I have met her, she is great; she is very assertive, never thinking about things twice. She's very assertive and whatever I have seen her doing she is just right there; she has an answer. ... If there is a change that needs to be done, she doesn't think about it. She just says, "Okay, this is what I think needs to be done." And I have seen that and seen her doing that and I think that is great.

Likewise, Bob perceived that change occurred within the unit, but change did not happen outside the unit. He did not share if nurses were involved in the change process; instead, he gave credit to the Nurse Manager and Team Leaders for the changes that occurred:

Within the unit, you see the changes; I think that the Nurse Manager and the Team Leader both want it to be a good unit and a good place to work. And, they are good about making changes that I think outside of their unit, falls apart.

Similarly, Tracy perceived that the Nurse Manager took action on concerns that nurses brought to her attention. When the nurse leaders were receptive and responsive to nurses' opinions/input, nurses perceived that this was beneficial (behavioral belief):

But she takes care of things. If she finds out anything's going on, she wants to nip it, right then. And that's kind of nice, because I don't need someone to stand up for me all the time, but every once in a while, things happen. And she's good about that. ... So, she doesn't let anything slide.

In contrast, some MJH ICU nurses perceived that nurse leaders were receptive to their opinions/input but did not take action. For example, Tom perceived that some Intensivists were not receptive to nurses' concerns regarding the care of hypotensive patients. As a result, Tom perceived that patients experienced poor outcomes. Tom wanted to change this outcome but he felt powerless to do so because the nurse leaders whom he brought the issue to did not take any action to improve the situation:

Tom: Well, I'd be begging my Intensivist and I could get them just about every bit of information, certainly the importance of it. You could state all day long until you are blue in the face; but it really depends on your Intensivist. I don't even know if I could even convince a charge nurse or Nurse Manager to try to convince the Intensivist because if he's not going to do it, he's just not going to do it, unfortunately. The care, the obvious reasons for it you could state all day long, maintaining kidney perfusion and things like that; I've seen some people develop acute renal failure because I didn't know what their blood pressure was for over an hour and a half. I couldn't get anything giving them drugs all day long. How I would go about changing it, I mean, really a policy change, I can't even begin to say, only except to talk to the right people, which has already been done.

Kim: And you feel that you get nowhere?

Tom: Nowhere, I mean, I just don't know if they are just too afraid to allow - or our Intensivist saying that they would rather just do it themselves and they're stopping it. I don't know what happens after the Nurse Manager portion of it. We tell the Nurse Manager we desperately need somebody else to help us put in art lines, and they say, "Well if the Intensivist doesn't do it than I don't know what to tell you." We have tried to get other doctors; we have tried to get Anesthesiology, which has happened a couple of times consulting another group or trying to get somebody else to do it, but that happens rarely.

Similarly, Sarah suggested changes to the staffing matrix to the Nurse Manager. Sarah believed it was beneficial for patient/families and nurses if they staffed the unit based on patient acuity rather than patient census. The Nurse Manager was receptive to Sarah's input; however, Sarah perceived that this was one issue that would never be addressed. The lack of action toward nurses' suggestions to improve care created an environment in which nurses failed to see the value of incorporating patient/family input into care decisions since it was not accomplished at the unit level. Also, they perceived that they were not always empowered to create change to make things better for patient/families and themselves:

There are some things, I think, in this hospital that I think aren't going to change. I had a situation the other day, last week, we have 16 beds, and we only had 12 patients. If you have 12 patients or less, you only get one secretary - we already don't have any techs and then they staff for what you have at 7 am we don't have an on-call. ... So it was just something that I had addressed and I think there are, like I said, some things in this hospital that, just from what I've heard over time, are really, they're never going to be changed. And it just seems to all go back to money issue.

So, they are not going to change the staffing matrix. It doesn't matter what your acuity is, I mean, you could have 12 patients and you could have 8 or 9 really sick patients; you could have 16 patients and only have 7 really sick patients. Ultimately, staffing is just based on the number of patients and I feel like sometimes if it was staffed based on the acuity that would help. So, that was my issue. So I brought it up to our Nurse Manager, she's the Acute Care Director, and it was basically, "no." So I feel like in the hospital, yes, I can go and approach her with things, she is very open to, but, I feel like, there's definitely a stance to certain things in the hospital seems to be a money issue it seems to stand.

Likewise, Dawn perceived that nurse leaders were receptive to nurses' opinions/input, but changes might or might not happen based on their suggestions:

I don't think our suggestions fall on deaf ears. I think they're very much heard by management. At least they can get consideration. ... I think we're listened to. It may not always go anywhere depending on who you talk to, what you say, and how important they feel your opinion is.

Similar to their peers in the MJH MS unit, there were some MJH ICU nurses that did not voice their opinions or provide input because they were afraid of repercussions. For example, Nancy shared that she did not voice her concerns because she feared it

could be “held against” her. Interestingly, she also perceived that nurse leaders were receptive to nurses’ opinion/input, but they might not use their suggestions:

I think that I am always scared that if I was to say the wrong thing, I don't want it to be held against me, if I was going to speak out about anything. ... I think the expectation is that if you come with a complaint, maybe come with a suggestion to fix it, as well. You know, don't just complain unless you have some ideas to make it better. ... Whether they will be used, I don't know.

Likewise, Wilma perceived that nurses were afraid to speak up because they feared they might “get in trouble.” Wilma shared that a nurse that participated in this study was afraid they might get in trouble over what they shared:

But...there are a lot of people that are afraid of getting black listed or you're going to get in trouble. Because someone said to me - I think they'd spoke with you - had an interview. I said, “Well, I haven't worked to set that up yet,” and they were, “What do you think of that? You think you'll get in trouble?” I'm going to be very honest. I have nothing to hide. I said, “I don't.” And I said, “she's doing a dissertation, do you understand what she's even doing.” And I think that they didn't understand that maybe you weren't part of the hospital and that this is - I said, “Do you know what a study is and stuff like that?”

Also, Wilma perceived that nurses did not bring forth problems so that they could be fixed because they were afraid of repercussions. In addition, Wilma perceived that nurses did not believe that they could create the change necessary to fix the problem that they identified:

I think not [nurses do not report things]. ... With nurses, especially nurses, they'll go on and whine for 20 minutes amongst themselves or complain to the next shift. And I'm, like, look, so what did you do about it? How can we better, fix it? Let's move on. ... And because either they don't want to take the time or they are just scared. A lot of nurses are scared that things are going to come back to haunt them.

Shared governance is widely recognized as an organizational structure that empowers clinical nurses to create change and is central to attaining Magnet designation. Shared governance councils, at the unit and hospital levels, were initiated at the MJH a few years ago when they began their Magnet journey. Over the past couple of years, the unit-based councils became optional and there was some activity at the hospital level. The MJH MS unit did not continue unit-level shared governance councils

but the MJH ICU did. The majority of MJH ICU nurses perceived that shared governance councils were not a mechanism in which they could create change; instead, shared governance councils facilitated such things as education and social events:

Tracy: Well, the main thing is actually active with our staffing council, who's like the social thing. It kind of helps. So, that's pretty active. The education council is active, too. ... Every year we have to make sure all these checklists of competencies are done. And so they do, every month, there's an education board that you have to sign. And if you actually read the boards, and do them, and have an education person explain it to you - well but we are all just mainly peers; but then, by the end you'll have all your competencies. So, they kind of facilitate that. I don't remember the other committee. I think there is another one....

Kim: Do you think shared governance is effective on your unit for problem solving?

Tracy: Sort of. I don't know. I don't think so. No. When there's a problem, they're not really involved with any of the solving of it. ... They facilitate stuff. They don't really solve anything.

Similarly, Bob perceived that nurses would not bring forth practice issues to the shared governance councils. Bob perceived that the shared governance councils did not create change and he did not believe that the Practice Council was beneficial:

Kim: If you had a practice issue or something you wanted to change on the unit would you take it to a council?

B: No. I mean, like, the Education Council, I think, will put the best practice on our poster boards and discuss that with people. ... I don't know how they do that [make changes] because I don't really care much for that other, the Practice Council or that.

Likewise, Fred perceived that shared governance councils kept him informed on a variety of topics but he did not perceive that the councils were a means to create change:

It [shared governance] is allowing your peers and co-workers to keep you in the loop, I guess. Keep you involved. Keep you up-to-date on education, on new trends, on new treatments. It is allowing you to better yourself and the ones around you, I guess.

Dawn also perceived that shared governance did not create changes in the unit. She did not believe that there was any benefit to shared governance because it was another task

that nurses had to do and it did not improve patient care. Dawn's example also provided insight into the top-down decision-making that occurred in the MJH ICU. Nurses were not involved in changes and they did not have input into what occurred on the unit. This created negative cognitive beliefs towards change, which consequently influenced their behavior:

Dawn: It's a little more vague term [shared governance] to me. I don't know. It's taking ownership of things around you in the procedures and such. Sometimes it just seems like a bunch of gobbly goup to me. I don't know. They form committees for us - another thing for us to do. I don't see it as being as beneficial as evidence-based practice, because I don't see it trickling down as much at the bedside and changing things as much. But then again, that's my perception.

Kim: Why do you think that is?

Dawn: It seems kind of like a top-heavy approach. At least the way it's been done here. It's more like you will join a group. You will join a meeting. You will join one of the different practice councils whether you like it or not. And we're gonna form committees. We're gonna make projects whether you like it or not, so we can get towards Magnet status or we can do it for something else. It doesn't seem like it's really instituted for the right reasons, maybe. And I think it takes longer for it to trickle down to the bedside and other areas, in my opinion.

The MH MS unit operated with the assumption that nurses inconsistently created change. Two factors influenced their ability to create change and they included: (a) nurse leaders who were receptive to nurses' opinions/input but did or did not take action concerning nurses' opinions/input and (b) shared governance was a mechanism to create change. The majority of MH MS unit nurses perceived that the Nurse Manager was receptive to their opinion/input and took action based on their suggestions. For example, Mona perceived that the Nurse Manager solicited nurses' opinions/input regarding how to improve a specific care process. The Nurse Manager planned to take action based on the nurses' opinions/input. Having the ability to influence how things were done on the unit influenced nurses' cognitive beliefs and behavior:

Oh yeah, we do have a voice. Every month or every couple of months, we'll have a meeting. At the end, she will get input from anybody. Now we have an issue with our Is & Os. We have a sheet that we use to put in the bathroom. And now we're having issues, because...it never gets used and now we're not charting our

Is & Os properly. So, what she did, she got a little box where you can put all your suggestions, or what do you prefer because we ended up choosing either to leave it where it is or put it in the chart rack right outside [the patient's room]. So, she didn't know which one, because people say different things. So, she asked everybody's opinion, just put it in the box and she'll decide based on that, everybody's suggestion. And she's always open to everybody's suggestion.

Likewise, Barb perceived that nurse leaders solicited and were receptive to nurses' opinions/input. Once nurse leaders were aware of the nurses' opinion/input they implemented changes reflecting this. Barb believed that having the ability to create change influenced nurses' cognitive beliefs and behavior:

I think change is easier here because, like I said before, they're going to try it and you know if it's not working you can have a say in that. So, it's just never easy, but I think you're heard. We do try things. ... And you have an opinion and...they listen. And, yes, our Unit Manager has a staff meeting once a month. Everybody sits down. She has an agenda, but it's open and you can say, "Can we try this?" ... And she'll say, "What equipment do we need?" and helping to get it and that kind of thing.

Similarly, Paige perceived that the Nurse Manager was receptive to and took action regarding nurses' ability to locate patient care equipment:

I have a lot of people come to me with complaints or concerns.... But I try to go to bat for people that have problems like not enough equipment. I say to our Nurse Manager, I don't know what is wrong we can't find some equipment. ... So what she [Nurse Manager] did, she listened and she put one of the techs on nightshift in charge of rounding up all the equipment and making sure that it would be there for the next day. She did that.

However, some MH MS unit nurses perceived that the Nurse Manager was receptive to their opinions/input but she did not always take action. For example, Cathy shared that she brought forth performance concerns to nurse leaders. Cathy perceived that the nurse leaders did intervene and speak with the caregivers, but the next steps were not taken which would have dealt with the performance issues. Cathy perceived that this influenced patient/family outcomes and it required more work from the other caregivers. Cathy perceived that this is not beneficial. The lack of action on the part of the Nurse Manager, created an environment in which nurses perceived that sometimes change was difficult to create even though it would be beneficial:

I think sometimes, some of the techs that we have don't care. I've made complaints about them sometimes, which I don't like to do. But, I think sometimes the management doesn't always listen to you when you make your complaints about some people, because they continue to do the same thing. ... But, I mean I just wish management would be a little bit more firm on them. It's like any job you have, management needs - sometimes people are going to do what they want to do unless someone's watching them like a hawk. ... I mean, I don't know her [Nurse Manager] that well but when she's around, she's easy to talk to, she's friendly. ... Just sometimes, I wish she would be a little bit more, I guess not so lenient on some people that don't do their jobs. When I told these people sometimes the things that they do, they keep doing them. And I just wish that that would change that she'd be a little bit harder on it. ... And actually there's one nurse that's on the floor.... Sometimes I don't think our floor is right for her.... I just think something more needs to be done with her because there's things that you've seen her do that are kind of dangerous for a patient. ... We've talked to her coach. I've talked to her coach before and they know and they're like, "Well okay, we're going to document everything and have a talk with her." I know they've talked to her, because they've had long talks with her sometimes during the day and we have to watch out for her patients.

Likewise, Debbie perceived that the Nurse Manger was receptive to her opinions/input but she was unsure how much she did about it. The inconsistent action by the Nurse Manager created an environment in which nurses were uncertain if they could create change:

I feel that she listens. I don't know how much she does, whether it's what she can do about it or if she bothers to do it. You know, I don't know. I know she's got someone she has to report to, so we would all say we want less patients because it's so heavy. Our patient load is very heavy. But she may be fighting for us to get that and just they won't allow it. I don't know. I don't know that part of her job. But I know that's probably the number one complaint people would say is six patients on our floor is far too many.

Similarly, Marcy believed that it was beneficial that the Nurse Manger was receptive to anything she had to say but she was not sure if anything was done with her concerns:

I like the fact that I can talk to our Unit Manager. I like the fact that I can just be upfront with her, be open with her, say what I want to say. It doesn't mean anything's gonna happen, but at least I can say it and I can say that I did something about it, better than just sitting back here and going blah, blah, blah.

The majority of MH MS unit nurses perceived that shared governance was a mechanism that they used to create change. Nurses participated on hospital- and unit-level councils, collected data, decided what to do to improve unit-level outcomes, and

implemented the change. For instance, Mona perceived that change was believed to be beneficial (behavioral belief) and nurses were involved in the change process. The belief that change was beneficial coupled with nurses' involvement in the change process influenced their cognitive beliefs and behavior:

So, we all sat in a group council that's responsible to check and make sure they make rounds, it's not only the CN3s [Clinical Nurse 3s or charge nurses], but they also have PCTs [Patient Care Technicians] and nurses. They check and make sure the bed alarms are working, that they make rounds on the patients that are falls risk, do they have the sign on the door, and their bed alarm is on and stuff like that. ... So, they do get those data, and then at the end of, I think, three months, they have a meeting and they'll say, "Okay, we have this, this is the results, ninety-seven percent of our patients do have all the necessary stuff that we need to prevent falls." ... We're trying to improve that; I think we gather information or data with certain things in the hospital. And then, if there's something that needs to be changed based on that data, then we change it with the falls and stuff. So, we gather all this information and then based on that, and then we see what we can do.

Similarly, Marcy perceived that nurses, through shared governance councils, created change. Nurses were involved in data collection, decision-making, and implementation of the change to improve the unit's outcomes:

Well, we do have a couple of people who are in charge of the councils and things like IVs, or diabetes, and that kind of thing. ... I'm sure they have a bunch of data and every time they get together they say okay, this floor is having a really hard time with this, how are the other floors doing. How are - just try to improve it as a unit....

Likewise, Barb perceived that nurses, through shared governance, could be involved and create change to improve patient outcomes and/or their environment. Nurses believed that shared governance was beneficial. The assumption that they could create change influenced nurses' cognitive beliefs and behavior:

Simply that I have a voice. That I can, if I choose to participate, there are opportunities to have your voice heard. To make change because you get to have a say in something. And I find the big thing at this hospital is they'll try something and if it doesn't work, and if there's enough dissatisfaction, it goes away. We get different equipment and we get new programs and they come and go; the good ones stay; but they do listen. So, yeah, shared governance means I can have an opinion. I can go to the meetings. I can decide what committees to be on.

Also, MH MS unit nurses created change outside of their shared governance councils.

Marcy shared an example of when nurses and unit leaders worked together to improve how patient assignments were made. Nurses participated in the process and decision-making to create the change necessary to improve their work environment:

Marcy: Actually, we have tried multiple times [to fix patient assignments], and it has actually gotten better; it has lately.

Kim: How did you go about fixing that?

Marcy: Just had team meetings. Really talked with everybody and got a lot of input from all the other staff members including myself and the management team. Our Unit Manger and management team really stepped up and said, "Okay, this is how we're gonna do this then. Charge nurses, you're gonna be the ones that's gonna be responsible to look to see the acuity of care." Like, look at all these things: does the patient have a Foley, does the patient have this, and does the patient have that. What is it that the patient has? What do you have to do for that patient? Is it nurse heavy or tech heavy? Because you don't want to kill the techs either....

The MH ICU operated with the assumption that nurses were empowered to create change. Two factors influenced their ability to create change: (a) nurse leaders who were receptive to nurses' opinions/input and took action concerning nurses' opinions/input; and (b) shared governance as a mechanism to create change. The majority of MH ICU nurses perceived that their nurse leaders were receptive to and took action on their opinions/inputs. For example, Angela perceived that any issue that she brought to the Nurse Manager was acted upon. This influenced nurses' cognitive beliefs and behavior:

In my experience, it's been done and nothing is ever pushed aside. Anything I have ever sent to our Unit Manager, she has always looked into and come back to you and say, this is what I did or this is what we found. I mean, that's just my own experience so, I guess, that this is probably what it's like across the board.

Likewise, Yolanda perceived that she could suggest a change she came across in a critical care journal to the Nurse Manager. Yolanda believed that the Nurse Manger would be receptive to her input and enact the change after soliciting other caregiver's opinion/input. Recall that this response is in opposition to what occurred at the MJH. At

the MJH, John shared that nurse leaders were not receptive and would not take action on suggested practice changes he might bring forth. However, the MH nurses believed that change was beneficial and improved patient/family and nurse outcomes. When nurse leaders were receptive and took action on nurses' opinions/input, change occurred and influenced nurses' cognitive beliefs and behavior:

Yolanda: Oh, I think it was actually in one of the critical care magazines about putting an area in the patient room. Have actual tape on the floor; this is your medication area because there were constant interruptions and you're trying to focus. ... So putting that limitation, that boundary.... We don't have these boundaries.

Kim: What if you wanted to do something like [cut off]

Yolanda: Oh, I'm sure.

Kim: Where would you bring that?

Yolanda: Our Unit Manager.

Kim: And you'd just do it?

Yolanda: Um, hmm. Absolutely. She's always open to anything. She would probably ask others, first, but absolutely she'd be open to it. She - that's one of the things that we're asked, do you feel that you can come to your manager? ... So yeah, she's definitely an easy person to go talk to, without a doubt.

Similarly, Greta perceived that the ICU's Nurse Manager and nurse leaders above her were receptive to nurses' opinions/input: "And then the whole thing - they listen to you, our recommendations, even the higher up in administration, and our Nurse Manager. They do listen to what our recommendations, I think. That's how I perceive it." Greta provided a specific example of when the Nurse Manager was receptive and took action based on nurses' opinions/input. The MH ICU nurses were concerned regarding their role on the Rapid Response Team and the lack of written orders that were available to guide their actions. The nurses expressed their concerns to the Nurse Manager and she conferred with nurse leaders above her and a Black Belt Six Sigma initiative was initiated to create the necessary change:

And another thing is doing the Rapid Response and we're not happy as far as doing that because we don't have any orders to actually guide us. ... So, they call the doctor but that didn't really cover us. So, we felt uncomfortable about that. So we brought it up to our Nurse Manager and they did the Six Sigma for the whole process. ... And we'll have somebody from each unit, so they can actually bring up what's their concern.... And they'll have a doctor. So, they have that kind of project, and sometimes they have what they call a yellow belt project, or they have what they call a lean project. So, it's kind of nice to be able to actually bring it to somebody.

Shared governance was perceived to be a mechanism through which MH ICU nurses believed that they could create change. The majority of nurses perceived that they could participate in hospital- and unit-level councils if they desired. Through the councils, nurses created change. For example, Angela perceived that shared governance was beneficial and afforded nurses the opportunity to be involved and create change. Angela perceived that the hospital was successful involving staff in the change process because all levels of administration were committed to its success. The basic assumption that nurses could create change was pervasive and influenced nurses' cognitive beliefs and behavior:

Angela: Yeah, which is good [shared governance]. I mean, if you have a group of people - they remind you that they don't want to be on anything and that's okay. I am actually on several [councils]. I am on a few committees. And the way I see it is that - and I am not going to say the hospital but the company - it's a company that wants to have their employees involved in the company. And the more times you have your employees involved in the company, then to me, you are going to have a successful company. Because everybody - they will participate. I mean you could do that with Circle K. So if you have your employees involved in that company, then you can have a successful company. ...

Kim: Do you think they are able to do that at your hospital?

Angela: I think so.

Kim: What do you think helps make this happen?

Angela: Well the top - that is what the top managers want and they have instilled that into the unit managers. And so, they in turn want the unit managers to make sure that excitement gets passed along to their players - team players. I imagine that that's the only way it gets done. And if there are certain things that don't work out then it's going to trickle back up to the big people [through the councils], something doesn't work out. I think...it is good.

Similarly, Ethel perceived that through shared governance, nurses created change.

Change was believed to be beneficial because it was viewed as a means to improve patient/family and nurse outcomes:

Well, we really try to get staff involved in the whole shared governance board so that they realize that they can make changes in their work environment and that they do have a say. So we have a skin resource nurse, an infectious disease nurse, IV therapy specialist, what else, there's different councils, a Policy and Procedure Council, a Nursing Council, Pharmacy Committees. Oh gosh, I wish I had the board in front of me; there are too many to remember.

Likewise, Jill perceived that nurses could be involved in creating change through the shared governance structure. Jill believed that shared governance was beneficial

because change was created to improve something:

There are different ones [councils] and it's nice because you can get involved where you want. Stuff that matters to you and stuff that you're passionate about. You can get involved in as much as you want or as little as you want. A lot of different councils that you can get involved with - with other disciplines, other departments in the hospital that you can collaborate with to make it easier between the two departments. Whether it be pharmacy or dietary or the lab or just intercommunication between the different departments, involve the committees with that.

Summary of nurses' ability to create change. The nurses' ability to create change varied across the units. In the MJH MS unit, nurses perceived that they were not empowered to create change. They perceived several roadblocks, which primarily involved nurse leaders who were unreceptive and/or did not take action based on nurses' opinions/input. This created an environment in which nurses did not see the benefit of continuing to voice their concerns because nothing changed or they were labeled as a "complainer." The MJH ICU nurses perceived that they were inconsistently empowered to create change. Their perceived barriers included nurse leaders who did not take action based on their opinions/input and that shared governance was not a mechanism through which they could create change.

In contrast, MH nurses perceived that they were empowered to create change through their shared governance structure. MH nurses were involved in data collection,

decision-making, and implementation of the change. This created an environment in which nurses believed that change was beneficial because it improved patient/family and/or nurse outcomes. Specifically, the MH MS unit had some undercurrents that the Nurse Manager inconsistently took action on nurses' opinions/input and this influenced nurses' ability to create the change they deemed necessary to improve outcomes. MH ICU nurses perceived that nothing hindered their ability to create change.

Cultural Dimension: The Nature of Human Relationships

The cultural dimension of the nature of human relationships includes basic assumptions that "define what is ultimately the right way for people to relate to each other" (Schein, 2004, pg. 138). The nature of how people relate to one another "makes the group safe, comfortable, and productive" (Schein, pg. 178). This cultural dimension is what people typically think of when they speak of "culture." Unlike the other cultural dimensions that deal with the group's relationship with its external environment, the nature of human relationships' assumptions concern "the nature of the group and the kind of internal environment it creates for its members" (Schein, pg. 179). Nurses in this study identified six attributes, which influenced their relationships: (a) nurses' ability to work together, (b) nurses' ability to confront each other, (c) nurses' ability to confront physicians, (d) physicians' ability to talk and listen to nurses, (e) physicians' ability to talk to each other, and (f) physicians' ability to talk and listen to the patient/family. Taking into account the interrelatedness of the cultural dimensions, other assumptions and beliefs also influenced how effectively nurses worked with each other and other caregivers, specifically physicians, to provide care that was evidence-based and incorporated patient/family preferences. Consequently, these assumptions and beliefs influenced nurses' ability to engage in EBP.

Nurses' ability to work together. The ability to work together as a team to provide care becomes important in light of the importance, which nurses placed on using

experience to inform clinical decisions and their ability to focus on doing what was best and right for the patient/family (patient/family centeredness). The MJH MS unit operated with the assumption that nurses inconsistently worked together to provide patient care. Cliques were one factor that nurses perceived influenced their ability to come together for the common good of the patient/family. For example, Silva perceived that a few nurses consistently did not help other nurses and spent most of their time sitting at the desk. From Silvia's perspective, she did not see how these nurses completed their work; most specifically, fulfilling the required hourly rounds. Consequently, nurses who were allowed to not focus on the patient/family to assure care was delivered, influenced nurses' cognitive beliefs and behavior towards following standards of care. Remember that nurses' beliefs and behavior towards following standards was inconsistent in this unit and they perceived that inadequate nursing staff influenced their ability to carry out evidence-based interventions. Also, nurses could not create the change necessary to fix problems; instead, they tolerated the unacceptable behavior:

So for the most part, everybody helps each other. There is just always going to be one or two on any unit that I've ever worked on in my life that doesn't want to pitch in. ... I see nurses stay in the nurses' station the whole day unless somebody calls them out to the room. They never even go down there to see, I mean, even now I don't know how they put their signature on the door [Hourly Rounds].

Similarly, Mary shared that nurses did not always work together to assure that patient/family care was provided. In this unit, certain nurses were allowed to not follow the expectation that they work together. Recall, nurses in this unit believed that they did not have enough staffing resource and their ability to work together might influence this control belief. Also, nurses in this unit could not create change to fix something that they believed was unbeneficial for them or the patient/family. Mary's example further supported the incongruence between stated expectations and nurses' behavior. Mary perceived that an espoused value of the MJH was teamwork; but Mary did not

experience this consistently on the MS unit. According to Schein (2004), values are negotiable and people can agree or disagree with them and act accordingly. Values are transformed into basic assumptions once they have reliably solved the group's problems. Basic assumptions are taken for granted and there is little variation within the work group; the degree of consensus results from repeated success in implementing certain values while solving problems. Evidently, the MJH MS unit valued teamwork but it was not yet transformed into a basic assumption because people could choose to help or not help others:

Mary: I think they say teamwork is valued but you don't see that happening as much as it should be happening.

Kim: Do you have examples of that?

Mary: Oh, well, I do. For prime example, people have assignments and not everyone's assignment is equal. And if others are having a problem getting their stuff done and there are some people who have had the easier day, they are sitting, instead of pitching in to help the other ones and get the floor done. I think that is wrong. I think that what should happen is that as the day wears on and you are done with your assignment, you've done as much as you have to do or whatever, and you have sit down time. Well, why not take your break, but then go back out to the floor to the other nurses who are running around with heavier assignments and go over and help them get their assignments done. So that everything can get taken care of then. Finally, at the end of the shift, everybody can be done and the patients are taken care of and it is not a problem. But I don't, I don't always see that happening. Certain people do that; certain people don't.

Likewise, Francesca perceived that some nurses helped each other and some nurses did not. This inconsistency influenced the nurses' ability to work together as a team to assure that patient/family care was completed. Also, recall that this unit operated with the assumption that standards and/or expectations were inconsistently followed and nurses perceived that they could not create the change necessary to improve their ability to work together. Francesca and Silvia's examples lend further support to these assumptions as well:

They are a team; you really are a team on that unit. If somebody's not doing anything and they see somebody running around, okay what can I do for you,

and it's really worked that way, it's really awesome. ... Hmm, well there are some who kind of just; I don't know; they just come and sit around. I don't know how they get their stuff done, I really don't. But they do. And they don't really ask; they could be sitting there reading a newspaper or something and everybody else is running around like a chicken with their head cut off and they don't ask; there's just a few.

A majority of MJH MS unit nurses mentioned that cliques influenced their ability to function as a team. From Grace's perspective, cliques that existed on the unit kept nurses from helping each other. Grace believed that the nurses who were part of the clique that sat at the desk were not beneficial for the patient/family or for their fellow nurses. Also, Grace did not see how these nurses that sat at the desk completed the care that was required:

Grace: I think it just became too cliqueish, and they would just "ch-ch-ch-ch-ch" to each other. You always wanted to - how do they get their work done, but they did, I mean, I don't know, I didn't get report from them. But they spent a whole lot of time at the desk. ...

Kim: You mentioned you're happy to see some nurses leave your unit. What would be the characteristics that you're happy to see go?

Grace: Those who were doing too much chit chat, like the cliquy thing. Yeah. Goodbye - not going to miss you!

Mary also perceived that the cliques on the unit prevented nurses from effectively working together. From her perspective, she was concerned with the favoritism, which was displayed by people in leadership positions towards their "friends." Mary believed that cliques were an inevitable part of the nursing work group and their behavior was accepted even though she believed that it was not beneficial for the patient/family or their peers. Recall that MJH MS unit nurses were not empowered to create change to fix what they perceived to be unbeneficial:

Mary: It is like that everywhere. There's just people who, a lot of people, a lot of the young girls get together, young people, I should say because there are girls and guys. They do get together and they are friends outside of the unit. And so, that kind of thing gets into the - for lack of better word, I'm going to call it a clique.

Kim: What makes you be in one clique versus the other?

Mary: I'm with the older nurses because I'm an older nurse. Yeah, age divides it. And also, I guess, the thing that we don't go out with that group of people. That group of people goes out, they go to parties, or whatever, have parties and invite each other. ... But just don't bring that stuff into the work place and show favoritism to your friends when you're the one in charge....

Likewise, Chris perceived that two groups of nurses existed on the MJH MS unit; one group was known as the "in" group and then there was everybody else. Chris perceived that these groups, or cliques, created a division in the unit and as a result, they did not function cohesively. In addition, Chris perceived that nurse leaders pitted the two groups against each other and treated them differently. The existence of these two groups and the different expectations that they were held to influenced nurses' cognitive beliefs and behavior towards working together, following standards and/or expectations, and their ability to create change to improve their environment:

Chris: There are a group who are - shall we say "in," then there is the rest of us.

Kim: How do the groups decide who falls where?

Chris: The "in" group decides who is in. ...

Kim: Have you guys tried to change that?

Chris: My observation has been that leadership, if not part of the "in-ness," is at least using it to their benefit.

Kim: Explain that more. How do they do that?

Chris: By not having, shall we say, not quite as much cohesiveness in the unit, you then can get information, particularly of a negative manor if you want it, by playing people against each other. Whereas, if it were a cohesive working unit together; then it wouldn't be possible to use it. ...

Kim: Can you give an example of how they do that?

Chris: There seems to be a tendency for the people who aren't on the "in" group to be written up for things, which may not be really that. It would seem far more appropriate just to talk to them as opposed to writing them up.

Francesca also perceived that cliques existed on the unit. She perceived that membership of one clique was comprised of the nurse leaders and nurses who wanted

to be in a leadership role. However, Francesca perceived that her unit was better than another unit to which she had floated:

There's only, well there are a few, and it's mainly the charge nurse team leader people. The higher up people, whatever, kind of go eat lunch together, whatever, stuff like that. I think our unit is different. I've floated before to another unit and it was a hundred times worse. I felt very out of place. So, our unit is way better when it comes to cliques and stuff.

Interestingly, Cindy was the only MJH MS unit nurse who perceived that working together as a team facilitated their ability to change their behavior. Cindy perceived that it would be beneficial to work together as a team because this allowed nurses to hold each other accountable and help each other follow standards and expectations:

Also, I mean, if everybody in a team works as a team and we all coach each other, this is the way it needs to be, then sometimes things get changed that way too. ... But, sometimes we all have to teach each other and be advocates for each other. We don't want to get in trouble and I don't want to see the next person get in trouble. So, how about we help each other to do this or we work together to do this?

The MJH ICU also operated with the assumption that nurses inconsistently worked together. Although cliques existed in both MJH units, their existence did not overtly prevent MJH ICU nurses from working together. However, nurses perceived that assistance was not forthcoming when different clique members approached each other. For instance, Jean perceived that it was difficult to find another nurse to help her clean up her patient when the need arose. Jean shared that there were two reasons why this was difficult. One reason was that some nurses decided to sit at the desk rather than assist their peers. The other reason was that nurses were busy with their own care and focused on completing what they had to do rather than helping someone else:

A lot of times everybody is busy and you have a patient that is having a bowel movement every hour. And you just got to clean them. And you have four other nurses that are very busy.... So, you have to take, constantly, their time away from their patients. ... Then you have to ask one person; you don't want to ask the same person next time. You have to ask somebody else and then they are busy, "Oh, I can't right now." And then you ask the other person and they say, "Well, yeah, give me a minute." And then you ask your Team Leader, "I am on a CAT call. I can't come in right now." So, then you have to wait for somebody's

time and then that delays [me in cleaning my patient]. Or, if you go try to do it by yourself, it is too much because they are too heavy. So, that's every day that I am going, "Oh my God, I wish I could just either be stronger or have somebody available." ... And, I feel like the teamwork - there are a lot of people, most of them, help. But some of them will spend [more time at the desk], they aren't always willing to help; there are some who always [help], they are never busy.

Likewise, Nancy perceived that MJH ICU nurses did not consistently work together because there were some nurses that were "territorial." These nurses would not let other nurses into their patient's rooms. This was unusual for Nancy but she accepted it as the norm for this unit. Also, the perceived inability for a nurse to create change facilitated their acceptance of a behavior, which they perceived to be unbeneficial. This facilitated the ability of the nurses to act as individuals rather than team members:

Some people look at it like that's their territory - stay out. And that's one thing I noticed in coming to ICU nursing that depending upon the nurse, some, they do not want you, and it doesn't matter who you are, if you are a fellow nurse - you, stay out of my room. I know I had never dealt with that before. That was something very strange, but it never occurred to me - even if it was some little need, or an alarm, or something - you go in to check it out, and they're right there, "What are you doing in my room?" It's like a very territorial thing that I had never dealt with before, but now I am aware of it. And I guess they have their reasons - different people, yeah. Different people, have different personalities. Yeah, that was new to me when I came to ICU. I went into the room for something and right away, they're like, "What are you doing in my room?" Oh, I wasn't trying to step on your toes - this is what was happening. So, that was a new experience.

Tracy also perceived that nurses inconsistently worked together as a team to provide patient care. Tracy perceived that most nurses did help each other but there were a few that did what was best for them instead of focusing on the patient/family. Again, Tracy accepted this behavior although she did not appear to agree with it:

I do like the people I work with and we're all a great team. ... If my patient's going down, I know we're gonna have to work on them and I'll not be by myself. It's pretty obvious there's a monitor so people can see that thing. If I'm like, "Hey, I need help in here. I have a question"... anyone will come help me. Or if I need help lifting, there's someone always right there. It's never an issue with that. ... It's a fun place to work. Everyone's a team player. ... There's a couple of older ones [nurses] that you can tell just want to retire and they don't do anything above and beyond. They'll do what they need to do to take care of their patient. You know they will. But they're not gonna necessarily go above to help you or something. ... But that's fine. ... There's not very many; there's gonna be a

couple, maybe two or three.... They're just not as involved in their patient. They'll pass their meds. They'll assess them. They'll keep them alive just like anyone else would, but they will sit at the desk and talk on their phone. ... Or, they'll be in the back on their cell phone or whatever. They just don't care as much, it seems. Maybe they do. I just - they don't show it. They'll go eat breakfast instead of assessing their patients, like, right away.

The majority of MJH ICU nurses perceived that cliques were present in their unit; however, they perceived that they helped each other when requested but help was not always forthcoming. For instance, Dawn perceived that cliques existed in the MJH ICU and their presence influenced how nurses interacted with each other. Dawn perceived that nurses could treat each other meanly. She also perceived that nurses helped each other "to a point" but if you were not in the right clique, help was not forthcoming. Dawn did not like this but she perceived she was not empowered to create the change necessary to fix it:

Dawn: Sometimes ICU can be a little bit cliquey. And I don't like that. I like to come here and do my job...and not to get too involved with people. Because, if you just get too involved in people's personal relationships, that can be a deterrent. And, in general, nurses have to be a little thicker skinned - especially ICU nurses because we're not always nice to each other. And we take the brunt from the patients, the families, the doctors, and each other. And after a while, you have to get thick skinned, or you just have to go home and cry once in a while. Because you just have to learn how to suck it up a little bit. But I don't like that in the sense that we're there for each other to a point, but you also kind of have to watch your back, too. I hate to say that, but there's that feeling too.

Kim: Have you ever tried to change that?

Dawn: No. I kind of gave up on that.

Kim: Tell me about the cliques. ...

Dawn: I think a lot of people do things outside of work together, and perhaps that makes them a little closer. And when you're not available to do those things or not asked to do those things, you don't. And perhaps they perceive you don't want to be with them or do things with them. ...

Kim: Do the cliques ever prevent people from helping each other?

Dawn: I would like to think not. Normally, when you ask someone for help you really need it and they'll help you – hey, help me turn a patient. Or I've got a really sick patient; can you take a peek at my other patient? Or can you get me something? No one's going to tell you no. They may say I need to wait a minute. I

need to do something else first. But typically, you'll get a decent response. They may roll their eyes at you, but they'll help you.

Similarly, Wilma perceived that cliques existed in the MJH ICU. In addition, she perceived that some of the nurses had "tough personalities" and consequently, nurses did not always treat each other professionally. Wilma did not believe that this was beneficial, but she was resigned to its existence because, she believed that was the way it was in nursing. Also, Wilma perceived that it was not advantageous when nurses did not work together for the benefit of the patient/family. However, Wilma perceived that she was powerless to create the change necessary to fix this:

They had a lot of tough personalities in there. They really did. They had some serious personalities in there - and I hate to use this because it's such a cliché word, but cliques. And they do in every unit, every hospital, especially nursing. And if you didn't fit in this and or that group - and I never understood that. ... And unfortunately, women - I'm one, but they tend to do that. Rather than communicate, they stab each other's back. It's horrible, that bitching, backbiting, backstabbing, you know, the monkey drops, I believe, whatnot. But trying to change it is hard. ... And we're all working for the same mission, the patient; however we have to do it, be it you're the housekeeper here you're the secretary. And I think that they forget that. I have this to do; it's not my job. I do this or I do that. ... It's stupid, childish. I call it high school. We're past that. ... I don't understand it - looking at all those cliques.

Likewise, Ricki perceived that cliques were present in the unit. He, like his peers, was resigned to their existence. He perceived that it did not matter which clique a nurse was a member of because he was able to relate to everybody. Ricki did not know if this was true for other nurses. Instead, he perceived this as his unique ability to get along with different types of people:

Ricki: This is probably the strongest group of people I've worked with because at the drop of a dime anybody will help anybody. I mean, I could have an issue with somebody in my pod and they will still help me because it's about the patient. ... I don't know that everybody's got that same relationship, but I know that I certainly feel that way. I could ask somebody that I don't even associate with a lot. But he'll be working right next to me and I don't do anything personal with him on the outside. I don't eat lunch or dinner with him, but I can ask them and they'll be right there.

Kim: Do you see different groups forming in your unit?

Ricki: There's always cliques, definitely; the cool group that's always been there. It's just like in high school. It definitely is. Yeah, but the funny thing is about that, it's just like in high school; I get along with the druggies, the sports guys, the nerds. I did that same thing then, and then I do it now. It's work. It's a family. Social setting. It's a little bit of everything. Actually, I hang out with these people more than I hang out with my own family.

The MH MS unit operated with the assumption that nurses consistently worked together and they focused on the patient/family. The "huddle" contributed to this unit's ability to work together as a team. Unlike the MJH, cliques were not an issue for the MH MS unit. For example, Debbie perceived that nurses, for the most part, readily helped each other. Debbie perceived that teamwork was valued and expected. Interestingly, Debbie perceived that this value mostly came from within the team itself and was supported by their Nurse Manager. Working together facilitated their ability to care for patient/families on the unit:

Debbie: We all get along pretty well. I think there have been times we have a higher turnover, I think, than other floors just because it is such a heavy floor; it's such a busy floor. But I think in the end, ninety-eight percent of the people in the floor would be willing to help and do help. We kind of work - try to work as a team.

Kim: Do you think working as a team is valued there?

Debbie: Oh yeah, yeah.

Kim: Who do you think instills that value?

Debbie: We as a team. I think the higher-ups, like our manager, tries. But she's not...out on the floor with us as much.... And so, she doesn't know how to help us the way we help each other.

Similarly, Barb perceived that nurses worked together to provide patient care. This facilitated the nurses' ability to focus on the patient/family and doing what was best and right for them:

If something goes wrong, all I have to do is say, so and so, come on. Or, if you go down the hall and hear something going on, you've got ten people running behind you. You very rarely have the one that runs out of the room; we're all running in. I like that. I like that a lot. On this floor, they're very good at that. You can ask for help and you get it.

In addition to perceiving that the “huddle” was a way in which nurses received information, MH MS unit nurses perceived it also facilitated their ability to work as a team and focus on the patient. For example, Cathy perceived that the “huddle” helped nurses to work together to provide patient/family care. Also, it was expected that nurses worked together in order to provide good patient care. Recall that this unit consistently followed standards and expectations and this influenced nurses to work together:

Usually when we get there, we have a group huddle with the floor in our break room. The Charge Nurse from the night shift goes over more important things or things to look out for such as fall risk patients so that we can all work as a team if you hear that alarm, because we have a lot of falls on our floor. And then, if there are any DNR [do not resuscitate] CMOs [comfort measures only], they kind of tell you about those. ... Because we kind of try to work as a team when someone’s on break or off the floor and needs help, you can kind of have an idea of what’s going on with them.

Similarly, Mona perceived that the “huddle” assisted nurses to work together:

When we come into the shift, we always have what they call a huddle. It gets us pretty much what’s going to be the day, the highlights, what’s our census, what are the more important things you need to know. And this helps us know what is going on so we can be aware of who may need help.

The majority of nurses from the MH MS unit did not talk about cliques and/or they denied their existence. However, two nurses did mention them. Cathy, for example, perceived that cliques were present on the unit but they have “since moved on”:

I think when I first started there was a couple [cliques]. But they’ve since moved on. But I think everybody for the most part gets along with everybody. They’ll go around and just have a good time; it makes life easier to work with.

In contrast, Pricilla perceived that there were aged-based cliques on the unit but this did not influence their ability to work as a team. Pricilla perceived that nurses did not treat each other poorly:

Pricilla: Well, it’s different for me because I’m older. They’re all younger girls.... ... And it was probably harder to get in with their cliques because being older. They all hang out together, they all do stuff together but all in all, we get along pretty good. And, I really like the group. They’re a bunch of good girls, they really are.

Kim: What makes it good?

Pricilla: They're very supportive. I don't see them as backbiting. Is there gossip? Yes, always but they're not backbiters they have fun, they laugh; you've got to laugh on that unit, you have to laugh and they do. And they're compassionate, very. Probably the best nurses I've ever worked with.

The MH ICU also operated with the assumption that nurses consistently worked together and they focused on the patient/family. Unlike both MJH units and the MH MS unit, cliques were not perceived to be present in the MH ICU. The majority of MH ICU nurses perceived that their environment was unique and people outside of the unit confirmed this. For instance, Yolanda perceived that teamwork was a core expectation and she never experienced having to wait for someone to help her. The assumption that people worked together to provide patient/family care influenced the nurses' cognitive beliefs and behavior. Also, recall that nurses in this unit consistently followed standards and expectations:

Teamwork. HUGE. Yeah. Teamwork is huge. And, once again, I have to tell you that I don't know what to compare it to except for what I hear. And you have somebody who's a stat transfer, who's coding, who's coming up from the ER, getting admitted. It's so rare that you ever, EVER - and I've been there for nine years - EVER having a problem finding somebody to come and help you. It's gotten to the point where sometimes there's too many people helping especially when someone's coding. Obviously, the charge nurse has to really take a look and assess and say, "Okay, you guys need to go. Way too many people in here." Such a huge, huge thing is teamwork in our unit. It's HUGE. It's awesome.

Similarly, Ethel perceived that everyone worked as a team to provide patient/family care. This was a core assumption and expectation, which influenced nurses' cognitive beliefs and behavior:

Honestly, it's a wonderful place to work. ... The teamwork. I mean we really do work well as a team. You always know that there's someone there that's going to help you. So, you're never in a pinch. ... I really feel like we have very open communication. ... We really have, for whatever reason, a very family-oriented unit. It really and truly is like no place I've ever worked before. I mean we really are there for each other. If somebody gets an ER patient, we all come in the room, help them get him settled; it's just that this is very much a collaborative team effort.

Likewise, Jill perceived that teamwork was part of the hospital and unit culture. Working together was a basic assumption and people were expected to work together to provide

patient/family care. This assumption influenced nurses' cognitive beliefs and behavior and was evident in Jill's example:

Definitely, we work together. I think we [ICU] have a culture and the hospital has a culture where you work together and they highly stress that. Its teamwork and I think they realize that we're all in the same boat and you help me, I'll help you. And like I said, our manager's very supportive and she really pushes that and our doctors are really supportive, too. We do tend to do a lot of things outside of work so that helps facilitate that also, that camaraderie and that family feeling.

Further evidence to support the assumption that MH ICU nurses consistently worked together came from people outside of the unit. This was the only unit that validated the nurses' perception with outsider's perceptions. These outside people validated the nurses' perception that their unit had a unique environment in which teamwork was evident. For instance, Jill transferred to the ICU from another unit in the hospital because of the teamwork she perceived was present in the unit. Once she became an MH ICU nurse, Jill also received confirmation of the teamwork from others:

I think the teamwork has always been there, yep. I mean that's part of what attracted me to go into that unit because you hear from outside departments and you can just see it. When I was working in another unit, I had interactions with the nurses up in ICU. And you can just see that that was evident - the teamwork. And when people float through our unit and stuff from outside hospitals or outside agencies that was always a comment by them, that we worked very well together and they are always very welcome.

Similarly, Ethel perceived that float pool nurses confirmed the uniqueness of their unit. Ethel perceived that the uniqueness of the unit was preserved by the Nurse Manager's hiring decisions:

Ethel: So, it's a nice place to work. And when we have nurses from the float pool...they all say this definitely is the best unit and be glad where you work - really unique setting here.

Kim: Why do you think that is?

Ethel: I don't - I think part of it - I think a big part of it is the way our Nurse Manager hires. I think she knows the personalities that work. I think that has a big, huge thing. Because I've sat in recently on the hiring process, we'll walk out, and she'll go, "Oh, they are not going to mesh here." They may have all the qualifications in the world but if they don't have that personality that she thinks will fit in there - I think that has a huge impact.

Kim: What do you think that personality is?

Ethel: I think it's got to be somebody that's flexible, willing to change, organized, and positive. I think it's a big key component.

Likewise, Angela perceived that other people confirmed the teamwork on the unit.

Angela credited the Nurse Manager and hospital administration in setting this expectation and holding people accountable to it. Teamwork was a core assumption and expectation in this unit and it influenced nurses' beliefs and behavior:

I have had so many family members and we have had so many people from other departments that have picked up on how well we all interact with each other. So, it's not like it's a fake thing or people don't see it. Whatever we are doing and however we are being it obviously flows into our family and patient and other outside employees that work within the hospital that actually see how happy we interact with each other. ... It's always been that way. And I want to say that the chief part of that is my boss. Yeah. She's something. I can say is - I think the hospital has instilled us to be friendly. They had a thing a while ago, ...they had these people that would come onto the unit and see if we greet them. Just say hello. It was probably five or six years ago...and we had secret people coming on the unit and they would be there five minutes and nobody said hello to them. So, they did this all over. I commend the organization for wanting to have that. And they would tell us - you can walk down the hall and you see they didn't even say hello to them. So, for the most part, the organization also may have contributed to that part.

Summary of nurses' ability to work together. The manner in which nurses worked together varied greatly across the units. The MJH nurses worked with the assumption that nurses inconsistently worked together. Additionally, the MJH nurses perceived that cliques existed in both units and influenced their ability to work together in different ways. In the MJH MS unit, nurses perceived that the influence that the cliques had on their ability to work together was rather overt and obvious. In contrast, the influence that cliques had in the MJH ICU was subtler. MJH ICU nurses perceived that most nurses helped each other. However, peer assistance was not always forthcoming; some nurses perceived they helped after they finished what they were focused on. Nurses from both MJH units believed that not helping each other and the cliques, which formed on the units, were unfavorable. However, recall that these units worked with the

assumptions that nurses did not always need to follow standards and expectations and they were not empowered to create change. The combination of these assumptions created an environment in which nurses could do what was beneficial for them and they accepted behavior that they believed was unacceptable because they perceived that they did not have the ability to create the change necessary to fix the situation.

In contrast, working together to provide patient/family care was a core assumption and expectation in both MH units. Moreover, teamwork was facilitated by the assumption that nurses followed standards and/or expectations. These assumptions created an environment in which nurses did what was expected which was to work together to provide care to patient/families. MH MS unit nurses perceived that the “huddle” facilitated their ability to work together because they were presented with patient/family issues along with the expectation that everybody worked together to prevent untoward outcomes and/or to meet the patient/family needs. Teamwork was most evident in the MH ICU and it was the only unit that was able to validate their teamwork by providing examples of when outsiders confirmed their perceptions.

Nurses’ ability to confront each other. Nurses’ ability to confront each other when they did not follow evidence-based standards and/or expectations influenced the overall ability of the nurses to incorporate evidence into their practice. The ability to confront each other was also influenced by other assumptions regarding: (a) following standards and/or expectations (doing best and right for patient/family) and (b) nurses’ ability to create change. The ability of the nurse to confront their peers varied across the units.

The MJH MS unit operated with the assumption that they did not confront each other. Instead, sometimes they brought the issue to the attention of nurse leaders who inconsistently acted on their input. The MJH MS unit nurses provided examples of when they did not confront each other. These situations either did or did not involve the use of

evidence. An example of a situation that was not based on the use of evidence and cited above was their ability to work together. Recall that nurses in this unit perceived that not everyone helped each other. When asked what they did when some nurses did not help others, the majority of nurses shared they did not confront the person and they did not bring the issue to the attention of their nurse leaders. For example, Silvia shared that she did not confront a nurse who routinely did not lend assistance. Instead, she “walked” away from this nurse when she requested assistance with patient/family care. Silvia’s behavior was influenced by her cognitive beliefs and unit assumptions, which related to her ability to create change (she could not and nurse leaders were unresponsive) and nurses inconsistently followed standards and/or expectations:

I can tell you what I do because Peggy came out one day and said, “Can somebody help me for about 15 minutes?” And I thought, “Peggy, I’ve been here for almost a year and you have never once helped me when I needed help; never once.” So, I just found something else to do when Peggy wanted help - I just went the other direction.

Similarly, Chris shared that MJH MS unit nurses did not confront nurses or techs that did not follow expectations. Also, most nurses did not bring the issue to the attention of nurse leaders because of their history of not taking action on nurses’ opinions/input. Recall that nurses in this unit were unable to create change to improve situations they perceived to be unbeneficial. The many assumptions at work in this unit influenced Chris’s cognitive beliefs and behavior:

Chris: It is clear that some people [nurses and techs] seem to have a lot of free time. But yet, it is never seemed to be noticed...by leadership. ... What is it about this person that permits them to have so much free time? If you are working on that unit, then you end up making up the difference. If it is a tech that is working under you, then you really have to make up for it.

Kim: How do you handle those situations, say you had a tech that wasn’t pulling their weight? How does your unit handle those kinds of things?

Chris: They don’t.

Kim: So, nobody says anything?

Chris: Nothing changes about it. Let's put it that way. There is conversation amongst the staff.

Kim: Do you ever go to your leadership with the problem?

Chris: To not see it you would have to intentionally not notice it. If it is not ten o'clock yet in the morning and there is somebody that is on the Internet on the computer - it's like, why do they have that much free time at the busiest time? ... To me, it just said this is typical that there are problems that create dysfunction on the unit that aren't addressed.

Likewise, Francesca perceived that nurses did not confront nurses who did not help their peers and they did not take their concerns to nurse leaders. Instead, the nurses accepted what they perceived to be unacceptable behavior. Again, nurses' inability to create change to improve something that they perceived was unbeneficial influenced

Francesca's beliefs and behavior:

Francesca: Nothing. I don't think we do anything, I think it's just - I mean as long as they get; they're getting their job done.

Kim: It sounds like you just kind of accept it.

Francesca: Yeah, yeah.

The majority of MJH MS unit nurses also did not confront their peers when they observed them not following evidence-based standards. Instead, sometimes they brought the issue to the attention of nurse leaders who inconsistently took action based on nurses' input. For instance, Silvia recalled a situation in which she observed a licensed practical nurse (LPN) attempting to insert a Foley catheter using sterile technique. Silvia did not speak up or intervene to stop her but was mortified by the LPN's actions. The LPN was unsuccessful so Silvia inserted the catheter but she did not take this as an opportunity to teach the correct technique to the LPN. Recall that Silvia perceived that EBP for nurses was based on their experience and this came to light in this situation. Silvia relied on her experience in a Urology Clinic where aseptic technique was used and applied this to the inpatient setting. Here, her cognitive beliefs influenced her behavior as well as the assumptions present in the unit:

Silvia: I can tell you one time when I was watching an LPN put in a Foley catheter and she had no sterile technique at all; totally none at all.

Kim: What did you do?

Silvia: I didn't do anything! I didn't stop her! But, I have to tell you this, based on evidence-based nursing, it was not sterile, it was aseptic technique, not sterile technique. And I had worked in a urology clinic...and we only used aseptic, we did not use sterile. Based on that, it was ok. But, I think maybe the LPN didn't get all the way through it or couldn't get it and I had to do it. So then, she was there with me when I had to do it. I did it, laid it out, and showed her, without teaching her, because she was an experienced LPN, for years and years. And I was just dealing with my own shock to think that she didn't have a clue what to do with it!

Similarly, Lucy shared that she did confront nurse technicians when they did not follow sterile technique while inserting a Foley Catheter. However, if she observed a nurse doing the same thing, Lucy would not confront the nurse; instead, she would bring it to the attention of the nurse leaders:

Lucy: Go to my charge nurse. Absolutely. ...

Kim: Would you ever talk to the person?

Lucy: Um, sometimes I have yes - say this is the better way to do this or it would be better for you and the patient if you did it this way.

Kim: Do you have an example when you did this?

Lucy: Uh, you know, Foley care, insertion, right then and there when you're putting it in you don't want to introduce anything; already setting them up, more problems, just having a Foley catheter to begin with, so, yeah technique at times.

Kim: And that's with techs?

Lucy: Yeah.

Kim: Would you ever do that with a nurse?

Lucy: I don't think so. I haven't had to thank God. That would be - I think that would be really awkward, then I would probably feel more comfortable talking to the charge nurse.

Likewise, Michelle shared a story in which another nurse's patient had a fast heart rate, which Michelle perceived she was not responding to. Michelle asked the nurse if she knew that her patient had an elevated heart rate but the nurse did not seem concerned.

Instead of asking more questions of the nurse to gain information on the situation, Michelle took matters into her own hands. Michelle reviewed the patient's chart specifically looking for medication orders and when she found none, she talked with the patient's doctor and obtained orders to treat the fast heart rate. Michelle administered the ordered medication to the patient. All this occurred without the patient's nurse's knowledge. In the end, Michelle did mention this scenario to the Nurse Leader, but never to the nurse, and it is unknown what the Nurse Leader did with the information. Working with the assumptions that nurses inconsistently followed standards and expectations, inconsistently confronted each other, and were not empowered to create change, created an environment in which nurses were able to take things into their own hands so that they could attempt to improve patient/family outcomes when they deemed it was necessary:

A couple of weeks ago, we had a patient that; our heart monitors are out where everyone can see. So...we had a patient that the heart rate was sustaining 170, for quite some time. Every time you looked over, it was 170. And the first couple of times, I said, "Hey, did you know that your patient's heart rate is 170?" And, the nurse seemed, at the time, not to be bothered with it, which is frustrating. Because you are seeing it and not only was I charge that day; so, not only was I seeing it, but other nurses were seeing it and telling me, "Oh, well."

So at that point, I believe I knew the doctor, maybe I had a good relationship, because you know there are doctors you have good relationships with. I think I had to have a good relationship, he was on the floor and I said, "Do you know, he's not my patient, but do you know that patient's heart rate has been sustaining 170 for about two hours now?" And then, after I talked to the doctor, I got some orders. I told our Nurse Leader. I said, "Listen, I'm just letting you know this is what went on and I'm just telling you. And you can take it, do whatever you want with it, investigate it. Maybe, the nurse knew something I didn't know; but they, obviously, couldn't be bothered." Obviously, before I talked to the doctor, I checked to see if there was anything, maybe, I could give him, the patient, any meds, anything like that, which there wasn't.

The MJH ICU operated with the assumption that they inconsistently confronted each other when they were not following standards and/or expectations. Examples of when nurses confronted each other will be presented first, followed by examples of when they did not confront each other. Nancy shared that she, and other nurses, confronted

their peers when they left the patient in an unsatisfactory condition. In this example, nurses were able to create some behavioral change by confronting each other when they did not perform to expectation. The assumptions, which were at work in this example, included nurses' inconsistency in following standards and expectations and their ability to create some change. These assumptions, in turn, influenced nurses' cognitive beliefs and behaviors:

Nancy: I think that we've come a long way in not accepting bad nursing care. If you come in and you're patient's a mess, I think that you just accepted it. But now I think that we're just more open on pulling a person in and saying, "Hey, that's not really a good way to leave things." Or now, they take care of what needs to be taken care of, each patient, as you might. I think we've come a long way in communicating that with each. When I come in this is what I expect my room to look like.

Kim: How do you think that happened?

Nancy: Just louder personalities and you see one person doing it and think, "Oh, well I can do that. She did." That's what happened to me. I used to just keep my mouth shut and just deal with what I'm in control of. And now, I saw other people who are more vocal about it. Oh, I can do that.

Likewise, Wilma shared a story about a nurse who was caring for an intubated patient with newly diagnosed meningitis and she was not following the appropriate infection control precautions. Infection control precautions are widely recognized to be evidence-based. From Wilma's perspective, the nurse was focused on visualizing the patient rather than on preventing the spread of infection. Wilma did confront this nurse and "reeducated" her on the necessary infection control prevention interventions. Again, the same assumptions (inconsistently followed standards and created change) were at work in this example and influenced the nurses' beliefs and behavior:

I remember one incident with this nurse, ...the patient had meningitis and so I closed the door. We knew it was new meningitis we were treating. And she said to me, "You can't close the door. I can't see the patient on the ventilator." I said, "Do you know what meningitis is? It's a safety issue here." And she was focused that she couldn't see the patient. I said, "Yes, you can see the patient, you have to move the chair up." ... And then she goes, "Well, this is how we always do it." I said, "I don't care how it was done, honey. This is - the patient has meningitis." And so I just - when I'm trying to teach somebody something and I'll say, "Look,

it's a safety. This affects me. I have children. It affects everybody in this unit and other patients. There's a reason for airborne precautions. Do you understand why you're wearing the mask? Well, if you've got the door open, you drop the ball." So, we sat down and reeducated her, went straight to the infection control [manual] because she just didn't get it. Her whole thing was she needed to see the patient on the ventilator if they're going to extubate himself. You have alarms, you go in there, and you check your patient.

Fred did not have an example of when he confronted a peer. Instead, Fred thought he would confront a nurse if he saw them doing something that was unsafe but if the nurse was doing something that was "blatantly unsafe" or "repetitive" he would take his concern to the nurse leaders:

First thing I would do is pull them aside and be like, "Dude, that is not cool. Maybe you shouldn't do it like that. Maybe do it like this." If it was blatantly unsafe, obviously, there is a line there. If you cross that line, obviously you have got to say, "hey this guy did this or this gal just did that." I would tell the next person on the chain of command, the Team Leader. If it is something small I am like, "Hey why are you doing it that way? You are supposed to do it this way." Or, let me show you this. If it happened again or in repetitive infractions obviously, you would take it up the next level.

On the other hand, some MJH ICU nurses did not confront their peers; instead, they presented their concern to nurse leaders. For instance, Jean shared a scenario in which she disagreed with a peer concerning which medication to administer to her patient. The other nurse was adamant that a certain medication was administered to Jean's patient. In order to accomplish this, the other nurse called the patient's physician and obtained permission to administer the medication, which she then did without Jean's knowledge. Jean did not agree with this but instead of confronting the nurse who intervened, she took her concern to the Team Leader who did talk to the nurse. To this day, Jean and this nurse have not discussed this incident and Jean perceived that their relationship was "normal." This example was similar to what Michelle from the MJH MS unit did and occurred because of the environment that was created by the assumptions that governed the nurses' beliefs and behaviors:

Jean: I had one time; it was a day nurse. And that was when I first started working there. And I think it was more like, "do you know what you are doing, not

sure what you are doing?" But there was a medicine that we [I] could give for blood pressure but it also would increase their heart rate. [The patient's] Blood pressure was low, their heart rate was high, and I said, "No, I want to put him on this one." And she said, it was not her patient, "No, put him on this type of medicine because the blood pressure is low." ... So, I said, "no, I want to put them on this one." She called the doctor and she said, "Can we put this patient on this type of medication? And he said, "Oh, yeah." So, she did it; she went and she put him on [that medicine]. And as soon as she put him on that medicine, his heart rate went even higher. And we had to turn it off. And I did tell the Team Leader - I said, "Look, my patient - and she just got in the middle, called the doctor, got an order, and did it."

Kim: Without your okay?

Jean: Without my okay, and it's my patient.

Kim: Does that happen a lot?

Jean: That was the only time. And I talked to the Team Leader. I said, "Look, I may be here for - I was there for...maybe five or six months but I am not dumb. I know what I am doing and if I don't feel like that's right then I'm not going to do it." And she [intervening nurse] is a very experienced nurse and she wanted to change it and she did it.... His heart rate went up to 170 as soon as we started that medication. That was the reason why I didn't want to do it. They talked to her, I think, and I think she, the other nurse, said, "Oh, I didn't mean to step on toes. I just thought that that would be a better choice because the heart rate was high but it was better than having a low heart rate, low blood pressure." I don't remember, but that was the only time it happened.

Kim: Did that nurse came back and talk to you?

Jean: No.

Kim: Did you ever go back to talk to her?

Jean: No.

Kim: How is your relationship today?

Jean: Hmm, it is normal and I think she knows that I think it was at the beginning. She was thinking more looking out for the patient. I think that is her; that is what I see now. She was more looking out for the patient and not making me feel bad. It is more looking out for their well being. That is the way I see it now; but that day, I did not look at it that way. But I think now, looking back, I think she was just looking out for the patient, making sure he was okay. And we talk, you know.

Similarly, Tracy shared that her decision to confront a nurse depended on the nurse and the situation. In the example that Tracy provided, she did not confront a peer after she

discovered that care was not being provided as prescribed. Instead, she took her concern to the Team Leader:

Sometimes you can tell the person; it depends on who it is and what's going on. You can ask, "how did this happen?" Or usually I'll just tell my Team Leader and they can deal with it ... Like there's this one patient, I remember they [patient] were pretty unstable. And they had a CVP line. And it was supposed to be checked every two hours and something was supposed to be done accordingly to the number. If the number was whatever, you should do this. And there was all this other stuff going on. So, I would take it off and just reconnect every two hours. And I realized that the night shift [nurse] had not done it. He had just written numbers down because the stuff was exactly where I left it. I looked on the monitor. It was never recorded. And so, I told the Team Leader.

The MH MS unit operated with the assumption that nurses consistently confronted each other when they did not follow standards and/or expectations. For instance, Marcy shared that when a nurse did not follow standards and/or expectations, she would educate them on the expected way. Other assumptions, which also influenced Marcy's behavior, included the assumption that nurses followed standards and expectations, nurses created change, and the expectation that they did what was best and right for the patient/family. Marcy stated, "Educate them. ... You expect nurses to know things and they don't - you have to educate. Like okay no, that's not how we do it here, all right, this is what you need to do." Similarly, Debbie shared that if a nurse exhibited the attitude "that is not my patient," she would confront the nurse and involve nurse leaders to help deal with the situation. The MJH MS unit nurses' desire to improve outcomes, follow standards, and ability to create change created an environment in which nurses spoke up when someone did not follow expectations:

Debbie: [Some nurses have] The attitude of that's not my patient, that's not my problem. ...

Kim: What do you guys do about it?

Debbie: Say something. But then we have our coaches [CN3s] that we talk to, too. And, if I have a problem I know who my coach is and I can always go to her. Then she can go to that person's coach.

Likewise, Pricilla shared that when she sees a nurse inappropriately handle chemotherapy, she confronted them and helped them correct their behavior: “Every time I see a nurse holding it [chemo bag], it’s like come on guys, put your gloves on.... But I’m just worried about your safety.”

The MH ICU also operated with the assumption that they consistently confronted each other when they saw someone not following standards and/or expectations. For example, Yolanda shared she would definitely confront a nurse if they were doing something “not quite right.” Also, she would inform her Nurse Manager if she saw a nurse do something unsafe:

Yolanda: Oh, I would definitely say something.

Kim: To whom?

Yolanda: To our Nurse Manager, absolutely, and have, yeah, definitely. I know I confront them. I mean I have to think of different situations and have I ever confronted a nurse when I see them doing something unsafe or not quite right. Unsafe, I’d go to our Nurse Manager. Not quite right, might need a little tweaking, I’d go to the nurse. Depending on the severity of it and if pertinent to the patient’s care. Depending on what it is. I would definitely open my mouth for sure.

Similarly, Greta confronted nurses who did not follow the standards and/or expectations. Recall that in this unit, nurses were expected to work together. However, nurses new to the unit did not always conform to this expectation. Greta confronted and encouraged the new nurses to behave accordingly. Other assumptions, such as nurses could create change and were expected to follow standards and/or expectations, were at play in this situation and they influenced nurses’ beliefs and behaviors:

Well, if they don’t really help, I always try to understand them. Like okay, they might be just new, because usually it’s the new nurses. It’s a new culture for them. ... And what I do with them I will just tell them, “Hey so and so, can you do me a favor and help so-and-so out?” And they’ll do it. ... And if that don’t work, we have to do their evaluation every so often anyway before the six months. And I’ll start with, “This was the feedback just so you know” because they might not know; this usually helps. And they do change when you talk with them. I have found that out from a couple of the people we told them that this was the impression, and I think you want to know the impression about you because sometimes we’re just oblivious about our environment. And that helps because

the culture from where they worked before is different from this culture. And it helps; so do it in a positive way.

Likewise, Tony shared that he confronted the nurse first and would take his concern to nurse leaders if the nurse still did not seem to understand the expectations:

Well, I'd mention it to them first. Number one. You know, maybe they have something on their mind, if they're not thinking correctly. Or if it's lack of knowledge on their part for the medication they're using or is it they're trying something that they find - to get somebody out of bed and they hadn't been out of bed in a month and they're 345 pounds. Now you've got to stop and think for a second. How much weight can you lift because even the two of us on that can be a lot. You know if this person goes down in a heap of potatoes. And I said, you need to think about this a little bit first. Yes. And anyway, I'd go to them first and bring it up. And then if they tell me something that didn't make sense, I'd go to the supervisor.

Summary of nurses' ability to confront each other. The nurses' ability to confront each other when they were not following standards and/or expectations varied across the units. Additionally, other unit-based assumptions influenced nurses' ability to confront each other and they included following standards and expectations and nurses' ability to create change. The MJH MS unit nurses did not confront each other. Instead, sometimes they would bring their concern to nurse leaders who inconsistently took action on their input. The MJH ICU nurses inconsistently confronted each other and/or brought their concerns to nurse leaders. Recall that both MJH units worked with the assumption that nurses inconsistently followed standards and/or expectations and they could not readily create change. When these assumptions were combined with the assumption that they did not or inconsistently confronted each other, an environment was created in which nurses were sometimes compelled to do whatever it took to improve patient/family outcomes. Each unit had situations where nurses over stepped their boundaries because they did not perceive that the nurse was responsive to the patient's needs.

In contrast, both MH units operated with the assumption that nurses consistently confronted each other when they did not follow standards and/or expectations. This

assumption, combined with the assumption that nurses followed standards and/or expectations, nurses could create change, and nurses focused on doing what was best and right for the patient/family created an environment in which nurses freely confronted each other when they did not follow standards and/or expectations.

Nurses' ability to confront physicians. The ability of the nurse to confront physicians when they did not follow standards or expectations is important to EBP. Recall that physicians were an important referent group to the nurses and they influenced their ability to use evidence in practice. If physicians did not follow standards and/or expectations, this in turn exerted social pressure on the nurse to do the same. Also, how each unit operated regarding following standards and/or expectations and nurses' ability to create change influenced their ability to confront physicians. The MJH MS unit operated with the assumption that they did not confront physicians when they did not follow standards and expectations. For example, Jennifer shared they she would not "feel comfortable" confronting a physician if they did not follow infection control precautions because she perceived them to be her "superior." However, she had confronted nurse technicians and might confront a nurse when they did not follow these same precautions. Jennifer's example illustrated the discrepancies in the power differential and potentially gender issues inherent in the nurse-physician relationship. Nonetheless, discussion of power and gender issues is beyond the scope of this study but would merit further investigation as to their influence on EBP adoption. Jennifer did not believe that the improved patient/family outcome was worth the cost that she would have to endure if she confronted a physician when they did not follow standards and/or expectations. Also reflected in Jennifer's example was the loss of focus on doing what was best and right for the patient/family and any desire to improve patient/family outcomes:

Oh! I don't feel comfortable.... I think the most I do is sometimes to coach the Techs because they tend to not follow the precautions. ... Physicians - no, I'm not comfortable doing that. First of all, we have to live with each other and interact on a daily basis, an hourly basis and that might be perceived as I'm being difficult and - I can make your life difficult as well. To me, I have enough problems to deal with that I don't want to create any. I'll let the Infectious Disease [people] deal with that. It probably would be nice if I was doing that, it might be part of my job, something that I know; but, having so many responsibilities and there is this Infectious Disease Department with the nurses walking around that - why don't they do it, after all. Maybe it's not a good approach, but that's the way I feel. I mean, I can, like I said, someone who is at the same level or below me. Maybe it's not a good thinking, but I'll probably say, why don't you do that. But somebody who is in some way superior to me it's kind of - I feel awkward in a way. Because I feel that I'm too dependent on them and they don't take it well. And, everyone's aware. Everyone's educated. Right?

Silvia shared a story in which a MJH MS unit patient required emergent intubation. The Code Team and a physician responded to their calls for assistance. The physician attempted to intubate the patient but the patient was "fighting." The nurses suggested that a certain medication be given to relax the patient prior to intubation but the physician was not receptive to their input. Physicians' unreceptiveness towards nurses' input was a compounding factor in this unit and will be discussed in the next section. Nonetheless, the physician continued to do what he deemed necessary even though he did not conform to current standards of care. The nurses were aware that he was not following established standards and they wanted the patient to not experience a traumatic intubation (positive outcome). However, instead of pursuing the medication issue further, all the nurses choose to remain silent. Once more, there were issues of power and possibly gender present in this example. Similar to Jennifer's example, other assumptions were also at work. Mainly they included that it was okay to inconsistently follow standards and expectations and nurses were not empowered to create change. Just like Jennifer, Silvia perceived that speaking up would be beneficial for the patient/family, but the cost to her to do so outweighed this benefit. This further supported the assumption that the patient/family was not the main focus of caregivers in this unit; instead, they tended to do what was best for them:

So then this doctor, they called him STAT, and he came and he was going to intubate [the patient]. ... And they [ICU nurses] were saying you need to give her something, I can't remember the name of the medicine - it started with an "a." ... He says, "She's ok, she's not fighting." Whoa, she was fighting! They were holding her down, we had to, I mean, and you could see she was fighting plus trying to talk! You can't intubate somebody when they are doing that! So, the ICU nurses didn't say anything. So, I thought - ok you guys think that's ok. So, he tried twice, until she bleeds a little bit and then we got Dr. Y who came. Dr. Y walked in and told him he was a pulmonologist and told them to give this stuff. They gave 5 cc of it, or 5 mg, I can't remember. And then he intubated her just like that! ... And I'm just thinking, gosh, this is just awful!

Likewise, Chris perceived that nurses did not confront physicians when they did not follow evidence-based infection-prevention interventions. The environment that has been created in this unit prevented nurses from speaking up even though they knew that compliance to the standards would improve patient/family outcomes:

Chris: Ah, the biggest thing, along those lines, as far as physicians with sterile technique and breaking it, I have never been involved in one where the physician didn't say I need new gloves. So, I can't say that ever happened, but what does happen is they come into isolation rooms with their stethoscope, they listen to the patient, and they haven't put on any gloves. They haven't put on any gowns. And, they didn't protect their stethoscope in any way. Then they leave, and they go to another room.

Kim: In your unit, do people see it and just let it go? Or do they stop them?

Chris: I don't know. I can't remember a time specifically where anybody ever spoke to a physician about it.

The MJH ICU unit operated with the assumption that nurses inconsistently confronted physicians when they were not following standards or expectations. Sometimes they brought their concerns to nurse leaders and physician behavior inconsistently changed. Examples of when nurses confronted physicians will be presented first. For instance, Ricki shared that physicians often did not don gloves prior to examining a patient's surgical site. Ricki perceived that he and other nurses, in this situation, gave the physicians gloves to put on and most of them complied. However, there were situations when physicians refused to use the gloves. Then, nurses documented this fact and brought it to the nurse leader's attention. Ricki perceived that

once this happened, someone talked with the physician but his or her behavior might not change. The assumption that people inconsistently followed standards and expectations and that nurses sometimes could create change also influenced Ricki's beliefs and behavior:

Ricki: If something as simple as inspecting a surgical site with bare hands. More often than not, we, well I've seen many of us, and myself included, reach up and give them gloves. It's not uncommon. It happens, unfortunately. And either they've taken them or they say, "Oh, I don't need that." If they don't need it then the problem is at some point, you probably have to do an incident report. And I've never had to do that; encountered that because anytime that I thought that a doc was going to go something like that - which is, I think, the worst thing I've seen - they've taken the gloves. But otherwise, an incident report will need to be done. We'd tell the Director. We'd tell the Team Leader and chances are they'll go to the Director and then she'll come to us and ask us the story about it because that's an infection control thing, too. You know how big they are about that kind of stuff.

Kim: Do you see that problem dealt with or does it continue?

R: Hmm, um, I hear that they get talked to. I don't know that they listen, because it might happen again. I think it's happened maybe once or twice. It's like you would think that they almost forgot that they didn't have gloves on because that seems to be the most improperly done thing, really, with the physicians; but so I know that they get talked to. What they do with it, that's a different story. If they feel like they're impervious. I don't know.

Jean did not have a specific example of when she confronted a physician who did not follow standards and/or expectations. However, Jean shared that hypothetically she would confront a physician who was doing something unsafe. Although, Jean was not sure that the physician would listen to her input, so she would take her concern to the nurse leaders and ask that it be kept confidential. Again, issues of power and possibly gender are suggested in this example. Other assumptions in this unit, such as inconsistently following standards and nurses could create some change, also influenced Jean's beliefs and behavior:

Jean: I would probably say the same thing. I don't know if they would listen but I would say the same thing, "do you think we should change this?"

Kim: What if they didn't listen to you, they kept doing what you thought was unsafe?

Jean: Oh, I would tell the manager. But I would want to make sure it is confidential. I would tell the manager, "I don't like the way he is, I don't think it is safe, I don't feel comfortable with him doing this every time I walk in the room" for example. It, it hasn't happened. It happened in another hospital but I would tell them that he didn't listen to me; tell the manager.

Dawn, like Ricki, handed gloves to physicians who did not follow infection prevention guidelines. Dawn was unique in her approach in that she persisted even if the physician expressed disagreement. Here again, the assumption that people were inconsistent in following expectations was present and Dawn had some ability to create change:

I would call on it. We had a surgeon who wouldn't wear gloves when he assessed patients, they would take off gauze - bloody gauze with no gloves. They were taking out drains with no gloves on. And we're like, I walk in the room and I put some gloves on, and I say, "Here's some gloves for you." And you try to correct their behavior. Sometimes it's just their - this is just the way they've always done it and they just kind of keep doing it that way. You have to address the fact that this is a new practice. You need to do it this way. And there again, there are some, it all depends on personalities and how you approach things. Some people don't like to be told what to do. And whether it's right or wrong, they're gonna be upset. But that's fine. They can do that.

Conversely, some MJH ICU nurses did not confront physicians when they did not follow standards and/or expectations; instead, they would inform their nurse leaders. For instance, Fred perceived that there was nothing he, as an individual, could do to stop physicians from not following standards or expectations. Instead, he would let nurse leaders know about it if it was significant enough. Also, nurses who did not confront physicians or ignored "minor infractions" portrayed a lack of focus on patient/family outcomes and the desire to improve outcomes. Recall that the MJH ICU nurses inconsistently followed standards and sometimes could create change. The combination of these assumptions created an environment in which nurses inconsistently confronted nurses and physicians when they did not follow standards:

Fred: There is an incident reporting system, called Quantros®. Not only for that [inappropriate care] but anytime there is an incident, a reportable incident you are supposed to fill out an incident report. Like, if a doctor or his consult hasn't come and seen a patient for two days, or if they did something that was detrimental to the patient. Not only that, you would report it to your Team Leader. There is

nothing you can really do, individually. Obviously, if it is like, they just say, “Hey, take them off of the vent and do this or that.” I am not going to do that. You’re the doctor, if you want to do that - go for it - I don’t want any hands in that. You just kind of learn who you can or can’t trust and who makes good decisions and who may not.

Kim: Is your incident reporting system anonymous?

Fred: It is a computer reporting system. You log in, so I don’t think it is anonymous per say. I am not certain - 100%. ... You actually have to take time to fill it out.

Kim: Do you think that stops people from using it?

Fred: Ah, sure, absolutely. It is so much easier to just brush it off than take the time out and do it. Obviously, if it is that important to you or that big of a deal, you are going to take the time out but minor infractions, I don’t know if most people take the time out to do it or not. Personally, me, if it is a little thing, I will probably just tell my Team Leader, “Hey, this guy did this or she did that.” But, if it is a big deal, yeah I will take the time out to do it. Is that a right or wrong thing? I don’t know; that’s just how I operate.

Likewise, Sarah perceived that she could not confront physicians when they did not talk with the patient/family. Instead, she would wait until it became a “big” issue and then she would involve physician leaders. Again, power and possibly gender issues were at play in this example along with other unit assumptions, such as nurses’ ability to create change and standards and/or expectations were inconsistently followed. Also, the lack of focus on the patient/family was evident in Sarah’s example:

I mean you could talk to them [physicians], but ultimately, if it becomes a bigger issue - of course you can go to their director or whatever, who ever it is, their Medical Director, basically, for the hospital. ... I mean...as a nurse, I can’t say to them, “Hey, you need to be talking to your families a little bit more.”

Similarly, Nancy would not confront physicians when they did not follow standards and/or expectations. Instead, if the issue were “serious enough” she would bring it to the attention of the nurse leaders; otherwise, like Fred, she would ignore it. Nancy’s example also contained issues about power and possibly gender. In addition, other assumptions previously stated were at work here as well. Nancy exhibited the same behavior as other nurses when she decided not to confront a physician because

the cost to her out weighed the benefit to the patient/family. This reflected the lack of focus this unit had on the patient/family and desire to improve care outcomes:

Kim: How about if it was a physician?

Nancy: silence

Kim: A little harder to confront?

Nancy: Uhm, hmm.

Kim: Why do you think it is harder?

Nancy: Well, because they're our superiors. Do they know something I don't or shouldn't. Yeah. Uhm, but I would go to my coworker first and say I saw this, if it was something serious enough I would ask to meet with the Team Leader.

The MH MS unit operated with the assumption that nurses inconsistently confronted physicians when they did not follow standards and/or expectations. However, if the issue was deemed to be major, nurses reported the incident and administration took action. Cathy provided an example where MH MS unit nurses confronted physicians when they exhibited inappropriate behavior. Cathy continued that if the physician was not receptive to what the nurse had to say, the nurse brought the issue to nurse leaders who dealt with the situation. Cathy believed that treating other people disrespectfully was wrong and her ability to create change coupled with the expectation that standards and/or expectations were followed, facilitated nurses' ability to confront physicians:

The nurses kind of ask them. The couple times that I've seen it, they say, "Can you please quiet down, that's inappropriate," or "Come over here and talk." Things like that. I mean it doesn't happen all the time, but it is not supposed to be like that. And, if they won't listen, then you just have to go to your upper management and let them deal with it.

According to Barb, nurses were expected to confront physicians when they did not follow the hand washing protocol. Barb perceived that nurses inconsistently did this because sometimes the physicians did not listen to them; perhaps this reflects power issues inherent in the nurse-physician relationship. In these instances, nurses contacted an

anonymous tip line and administration intervened. Also, if the physician issue was deemed to be major, Barb perceived that assistance from administration was a phone call away:

Barb: Physicians are touchy because just hand washing is frustrating. We are supposed to say something all the time. You know, percentage-wise, do we say something? I mean, it's my Team Map and I'm still never comfortable because some doctors will not listen, no matter what you do. You're supposed to be able to and you're supposed to call in on the anonymous tip line and say something.

Kim: Do you guys do that?

Barb: We do it. Do we do it all the time? No, but we will do it. ... If a doctor is doing something wrong or if they're having a real issue, yeah, then it's just a phone call to the AOD [Administrator on Call]. Let them call Medical Management. You don't deal with the problem on the floor. I have had that a few times.

Likewise, Mona shared that she confronted physicians when they did something "minor" but if it was something "major," she would take the issue to nurse leaders who intervened:

Mona: Go to the charge nurse. Yes, I know they do have - because they have to - the charge nurse, I think, has to relay it to the manager and the manager has to communicate it to a risk management for doctors. Something like the quality control...and [they] will do something about it. So, that's how we do it. ...

Kim: Have you ever or has your unit done that?

Mona: Like if we reported a physician? Not that I'm aware of. I don't know if it's been done in the past. ... I've always got something to say about physicians, but something that not to a point that it impacts the patient's safety and really needs to be addressed but most of the time something that we can deal with. Now if...we can address to them, if it's something minor. Then we talk with them, and they say, "Okay, I didn't know about it." And then they just have to do something about it. But like if it's something really major, that's something that really needs to be addressed and it will eventually go to the quality control group.

Paige shared that she confronted physicians when they did not adhere to infection control guidelines. However, the physician might not listen to her. In these instances, Paige shared that she used the anonymous tip line. However, it was unclear if this was consistently done. Also, once a physician was reported, Paige did see behavior changes but from her perspective, it took awhile. The assumptions present in this unit influenced

nurses' beliefs and behavior. Nurses perceived that they followed standards and/or expectations and they could create change to fix things:

Kim: What if it was a physician?

Paige: Oh, like one who doesn't wear a mask or gloves in a neutropenic room?

Kim: Yeah, what do you guys do?

Paige: Tell them. "Ah, excuse me, but there's an isolation - you are supposed to" - "I am not putting that on."

Kim: Then what do you do? ...

Paige: We have a tips line - anonymous line that we can call and I have used it before. ... Anything that you see that is unsafe. It could be the housekeeper or anybody that does something unsafe. ... We have doctors that won't wear their name badges - I call the line.

Kim: Do you see their behavior change? ...

Paige: Yeah, yeah. I think at some point, they do change. ... Doctors - we will page a surgeon one time, we had a surgical issue with a patient who had surgery. Doctor doesn't call back - never ever called back. Never.

Kim: What did you guys do with that?

Paige: We called, I think, probably the primary doctor or something. ... And I can't remember [everything], it was quite a while ago. I reported him. He calls back now; yes, he does. So I know that something was done there. You know, there was a doctor who was sexually harassing us. He is no longer with the hospital.

Kim: So they do deal with problems, it sounds like.

Paige: Yeah, but it's not like immediate change. But these, yeah, sometimes it takes a while if you report a doctor.

Marcy shared that she confronted physicians by handing them the evidence-based standard that they did not follow. Marcy perceived that her motivator to do this was the patient/family outcome; so doing what was best and right (following standards) for the patient/family influenced her behavior along with her perceived ability to create change. Marcy perceived that if the physician did not heed her input, she reported it to hospital administration and the issue was dealt with "quickly":

Marcy: I would print it out and hand it right to him. ... I would, because they're not only putting the patient at risk if they're not doing something right, and the patients my core, you know that. So I mean I'd be like, "Hey, look at this buddy, do you see this, this is the clinical standard for what you're doing right now, and this is not right." I mean I'd obviously be nice about it. ... We've had to do that a couple times because you have new doctors that come in from different countries or just from different hospitals that are completely different. Some doctors are set in their ways and are - yeah whatever; and then you take it above; you talked to the doctor, you told the doctor everything, you take it one-step above.

Kim: Do you feel the institution deals with that?

Marcy: Oh absolutely, quickly. Yeah, because they want to be a number one hospital, and if their doctors are not number one then they're not gonna be up on the chart and that's what they want. They want people to see that Blank is a great hospital, the top 100 for how many years. I mean how many times have you seen that? If one of their doctors, I think that's the quickest thing, you know, nursing whatever, but if a doctor does something wrong or a doctor doesn't step up to the plate, they're hiring these doctors to be professionals, to be the people who are the example for the hospital. If they don't, that's where they get screwed.

The MH ICU operated with the assumption that nurses confronted and/or called the anonymous tip line when physicians did not follow standards and/or expectations.

Tony shared that he confronted physicians in the same manner he did when a nurse did not follow the standards and/or expectations. The assumption that standards are followed and nurses created change influenced Tony's beliefs and behavior:

Bring it up to them the same way [as if it were a nurse]. Had a guy one time he was trying to start a central line and he missed on the right and he started going on the left to put the central line. I said, "Wait a minute, you got - we haven't had a x-ray to see if you went through the lung on the right yet first. Let's do one side at a time, why not try the right neck first."

Similarly, Greta shared that nurses consistently confronted physicians when they did not follow the central line bundle checklist. The evidence-based checklist helped assure that infection preventions interventions were followed. Having the nurse confront the physician became central to their adherence to this standard:

Greta: Even they will check the doctor when they put in a central line bundle, "No, no, no, you have to be all gowned now."

Kim: So the nurse will stop him?

Greta: Yeah, they will stop them because they have a checklist that they have to do. They have to check the doctor and make sure they do 1, 2, 3, 4, and 5. They're good at checking - now we have to do all this. When you put a central line in like that, except when it is a code.

Likewise, Ethel shared that she confronted physicians when they did not follow infection prevention guidelines. However, there was one unreceptive physician whom she would report to administration via the anonymous tip line:

Depending on who the physician is, I would walk up to them and say; if it's that one grumpy man I would just call that anonymous line. Otherwise, if it were one of our others, I'd say, if it's an isolation room and they go to walk in, "you're crossing the line and you gotta put on whatever." So, I mean, they're pretty receptive. Oh, yeah, yeah. I'll do it.

Summary of nurses' ability to confront physicians. The nurses in this study identified physicians as an influential referent group regarding their ability to use evidence in their practice. Consequently, the nurses' ability to confront physicians when they did not adhere to standards and/or expectations influenced their use of evidence and patient/family outcomes. Other assumptions, which also influenced the nurses' ability to confront physicians, included how standards and/or expectations were followed and nurses' ability to create change on the unit.

Power and gender issues inherent in the nurse-physician relationship were overtly apparent in both MJH units. In the MJH, nurses considered what it would cost them to confront the physician when they did not follow the standard and this often outweighed the perceived benefit for the patient/family. This reflected the MJH nurses' lack of focus on doing what was best and right for the patient/family (patient/family centeredness). The various beliefs and assumptions at work within the MJH MS unit created an environment in which nurses did not confront physicians when they did not follow evidence-based standards. Recall the assumptions and beliefs at work in this unit: (a) nurses inconsistently followed standards, (b) nurses were not empowered to create change, and (c) nurses were not always patient/family centered. The environment in the

MJH ICU was a little different because caregivers inconsistently adhered to standards and nurses could create some change. This resulted in nurses who inconsistently confronted physicians when they did not follow standards and/or expectations. When MJH ICU nurses encountered physicians who were resistant to their suggestions, they would bring the issue to nurse leaders. However, MJH ICU nurses perceived that after this was done, physicians did not always change their behavior.

Power and gender issues inherent in the nurse-physician relationship were less apparent in both MH units. Unlike their MJH peers, MH nurses expected that they and other caregivers followed evidence-based standards and/or expectations. This is reflected in their focus on doing what was best and right for the patient/family. Recall that the patient/family was their “center” and/or “boss.” Specific to the MH MS unit, nurses inconsistently confronted physicians because some physicians were unreceptive to their suggestion. However, nurses brought their concern to nurse leaders and/or administration and they perceived a change in the physician’s behavior. The MH ICU nurses consistently confronted physicians when they did not follow standards and/or expectations. This primarily took place in person and less frequently by using the anonymous tip line.

Nurse-physician communication. The effectiveness of nurse-physician communication influenced the nurses’ ability to engage in EBP. Specifically, the effectiveness of this communication influenced the ability of the nurse to incorporate patient/family preferences into care decisions. Nurses spend more time with the patient/family than physicians and often learn of their preferences. However, when physicians did not seek, listen, or respond to nurses’ input, frequently, patient/family preferences were not incorporated into care decisions. The effectiveness of nurse-physician communication varied across the units and different factors in each unit influenced this communication.

The MJH MS unit operated with the assumption that it was acceptable for physicians and nurses to inconsistently talk with each other about the patient/family. In the MJH MS unit, several factors influenced nurse-physician communication and they included: (a) receptiveness of physicians to nurses' input, (b) physicians seeking out nurses, and (c) physicians treating nurses respectfully. Interestingly, this was the only unit where nurses shared that they avoided and/or withheld patient/family information from physicians when they were unreceptive and/or disrespectful. For the most part, MJH MS unit nurses perceived that physicians were receptive to and sought out their input. For example, Cindy perceived that some physicians sought her out, solicited her input, and were receptive to what she perceived was important for the patient/family. When this occurred, Cindy perceived that she conveyed patient/family preferences to the physician and they responded accordingly:

There are a lot of physicians who are open and receptive to the nurses' recommendations. And, okay, "what do you want done, Cindy? What are you asking me for?" "Blah, blah, blah." Okay, done and it's written. But that's because they're comfortable, I probably think they're comfortable knowing that I'm taking good care of their patients. So, if I happen to make a recommendation or offer some kind of advice or my opinion based on what the family told me. Please take it up for consideration.

Similarly, Lucy perceived that when physicians were receptive to her input, this led to a professional discussion regarding what was best for the patient/family:

I think when there's an appreciation for what you see and there's an openness to hearing everything that's going on with a patient and then when you ask for something there is a back and forth conversation the way two professionals should have. That's what makes it nice. And there are doctors like that and you're just like, oh, this is wonderful. This is great, and also this and this and this is happening. Can I have this? Sure, you know.

Also, Silvia shared that some physicians sought out the nurse and asked for their input about the patient/family. Communication between the nurse and physician facilitated the conveyance of patient/family preferences:

I love the doctor that will say, "I need to talk to the nurse who has this patient," because then they call me. I come down to the station and I talk to him and tell

him what I see, sometimes I'm needing this kind of medication form, or the patient wants this, or I have an observation to tell them about that maybe we could do something different here. And that kind of thing and it saves the doctor all kinds of trouble if they would just do that.

Likewise, Mary shared that most physicians were receptive to her input regarding patient/family needs. Physicians' receptiveness and willingness to talk to the nurse facilitated the incorporation of patient/family preferences into care decisions. Mary stated, "I think the relationship is pretty good; I think most of them are very receptive. They ask you about the patient, they're receptive to what you are telling them about the patient's needs, yeah, for the most part."

Conversely, there was an undercurrent that some physicians were unreceptive and did not seek out nurses' input. For example, Silvia shared a story about a patient who was not doing well and the physician discounted her assessment and was upset that Silvia was bothering him. The physician's unwillingness to listen and respond to Silvia helped create an environment in which patient/family's needs were not perceived to be central to how they operated:

In fact, I can tell you one patient that I had. ... She was acidotic; that was given to me in the history. She was sort of crazy acting, and kind of slow talking, and drunk looking, and terrible, I mean she just looked bad. ... And we had already called the physician because her respiratory rate was so high. She was clammy; she just looked awful. And he said, "She's been that way since she came to the hospital; there's no problem here. I'll be there." He said I'll be there and I said, "I don't know if you want blood gases or something [else] we could do to get her better breathing." And, it was like he was mad at me for calling him because she was always that way - what was I doing calling him? So he said, "I'll be there." So I figured he would be there in about 20 minutes, right? Well, it was getting to be ten-thirty, eleven o'clock, and he wasn't coming.

Likewise, Cindy perceived that some physicians were unreceptive when she presented patient concerns to them. In the situation that Cindy shared, a frequently admitted patient complained of pain, which was not being adequately treated. Cindy informed the physician of this and, interestingly, neither Cindy nor the physician looked to research to help them decide how to best treat the patient's pain. Rather, it appeared that both relied

on what had worked in the past. In this situation, neither the physician nor Cindy was focused on doing what was best or right for the patient:

There's a lot of, maybe not so many, maybe not used a lot, but there are sometimes I run into encounters with physicians where the patient - mainly the frequent flyer patients who come in a lot. ... The physician comes in or you'll call them, "such and such is low or the patient is complaining about pain and their pain med is not working for them." And the physician might brush you off, "Oh, they are already on this, so what else can we do? I am not sending this patient home on this Dilaudid; he's going to have to know he is not going home with this." Kind of things like that.

Grace experienced a similar situation. A physician was initially unreceptive to her concerns about a patient because he did not want to come to the hospital. Grace persisted, the physician acquiesced and came to the hospital, but he was not happy. In this situation, Grace was focused on assuring that the patient was appropriately treated but the physician was not. Consequently, he delayed treating the patient. It was unknown what the patient circumstances were. However, from Grace's description, it appeared to be related to maintaining the patient's airway, which usually requires a more emergent response. Delaying treatment in such circumstances tends to go against what evidence suggests. Also, in light of the lack of receptiveness by the physician, Grace shared that she would not call this physician in the future. This was a typical response for nurses in this unit because they not only avoided unreceptive, disrespectful physicians but they also withheld pertinent patient/family information from them:

Grace: When you call and they don't call back. When you call to prevent an emergency and having one tell you - I'll never forget this name because I'll never call you, never. And it's like, "Well, if I can't make it, can so and so doctor go over there and do it? Well, how about?" And then they go, how about the other doctor - the emergency room doctor can he deal with it? And I'm like, "It's your patient." And it turns out - can the respiratory therapist? Well, I called the respiratory therapist and no, she can't do it. So I called him back and he was, "Oh, do you know what you have to do?" I'm like, "Yeah, I want to prevent that; I need you to come in."

Kim: What did he do?

Grace: He came; but he was pissed off as hell at me.

Another factor that influenced nurse-physician communication was the MJH MS unit nurses' perception that some physicians were disrespectful. For instance, Jennifer perceived that a few physicians were "demeaning" towards nurses. When physicians were disrespectful, nurses did not consistently confront their inappropriate behavior. However, one nurse did document a physician's inappropriate behavior but Jennifer did not perceive that the physician's behavior changed. Recall that the MH was different in this respect; MH nurses perceived that physician behavior did change after they confronted them or reported their concerns to administration. Also, MJH MS unit nurses tended to avoid physicians who were unreceptive or disrespectful:

Jennifer: How being treated by doctors; there are a few doctors that are very, one of them is a former nurse by the way, very demeaning. They are treating us like - you are stupid, you are inferior to me. And there's not much that's being done about that. I hear nurses complain and situations keep happening.

Kim: Do you have examples of that?

Jennifer: Yeah, the physician who is a former nurse and - ...that we are not doing the job that we are supposed to. And sometimes she, just in front of everybody, she grills the nurse about bowel movements or not documented - "What kind of nurse do you think are you? How long have you been a nurse?" Stuff like that.

Kim: What do you guys do?

Jennifer: Feel bad, feel stupid, and vent to peers. And then, recently, I advised the nurse that you can write an incident report about what they are saying and send it to staff relations and see if that helps. Because those complaints about physicians are supposed to go to a certain person who deals with those situations. Whether it helps - I don't know.

Kim: Has anyone done that on your unit? Have you done that?

Jennifer: No, but the nurse that I advised her to do it - she did.

Kim: Do you know the outcome of that by chance?

Jennifer: No. Probably - I don't know - we would probably see a change in behavior maybe for some time. But, I didn't see any. This is probably this physician's personality.... I don't like to talk to her - nobody does because you never know when she is going to attack you, what she's going to question. I get uneasy approaching this person.

Likewise, Michelle perceived that some physicians were disrespectful to nurses. Michelle shared that nurses tended to avoid disrespectful physicians. Recall that MJH MS unit nurses did not confront physicians and they were not empowered to create the change necessary to improve a situation that they deemed was unbeneficial. When this happened, there was no opportunity for the nurse and physician to discuss the patient/family's care:

Michelle: There are physicians that are very rude all of the time, no matter what you do. You could be nice as can be, their patient can be perfect, and they're just rude and that's that. ... I personally have a "Hey, what's up," friend-type of an attitude as opposed to "Oh, you're a doctor. I should bend down and kiss your feet" or something. I hear stories that back in the olden days, nurses used to get up for doctors and let them have the chair and the computer that they were working on. And, I don't do that. But I think that it's just different that way. ...

Kim: What are the characteristics of physicians that you do not have good relationships with?

Michelle: They are not patient; they're very impatient. They are not caring or compassionate and they are just trying to do their job and get their patient out of the hospital.... And sometimes I think that, just personally, they can be very rude and some people are just mean. And I find that that's them. Those are the ones that come screaming down the hall and when you see them walking, you walk away.

Similarly, Mary shared that she and other nurses avoided a specific physician who treated nurses disrespectfully. Again, this did not promote communication between the physician and the nurse about the care of the patient/family. Striving to do what was best and right for the patient/family lacked when communication was nonexistent:

I still shy away from her. We see her coming down the hall and we go in our rooms. We don't want to approach her because you don't know if she's going to be responsive, you just don't know how she is going to be, so I'd rather not deal with her.

Also, Cindy shared that she communicated patient/family preferences to receptive physicians. However, if the physician was unreceptive, she did not bother to communicate such vital information. This represented the lack of focus this unit had on

having the patient/family as their center and always striving to do what was best and right for them:

So, when I get to know little information, like this is the way they might want things done or I was talking to the family and this is how they want things done - I'll communicate it with the physicians; the ones who I'm comfortable talking to. Some of them, they don't care and you know they don't care, so, I just don't pass that information on to them.

The MJH ICU, like the MJH MS unit, operated with the assumption that it was acceptable for physicians and nurses to inconsistently talk with each other about the patient/family. In the MJH ICU, several factors influenced nurse-physician communication and they included: (a) receptiveness of physicians to nurses' input, (b) physicians seeking out nurses, and (c) nuanced nurse-physicians communication. The majority of nurses perceived that physicians were receptive to their input and sought them out. For example, Sarah perceived that the Intensivists were receptive to nurses' suggestions about patient/family care: "Most of our Intensivists we get along with pretty well and have a pretty open relationship with; most of them are pretty open to suggestions.... ... Having that there is tremendous." Likewise, Bob perceived that the Intensivists were receptive to nurses' input and they were able to have a professional discussion about the patient/family's care:

Bob: I think it's a good relationship; they're helpful there, they're always trying to educate the staff, they're always open for discussion, and I think it is a really good relationship.

Kim: What do you think makes it good?

Bob: That they're open and that they're willing to discuss things we are feeling and listen to what you have to say.

Similarly, Nancy perceived that the Intensivists were receptive to nurses' input and consequently, they were able to have professional discussions with them regarding the patient/family's care:

Well I think, I think it's a really great relationship, actually. ... Now, being on days you are around most of the day with them [Intensivists] and I think they are very

open and they are easy to get a hold of 99% of the time. And when something is happening, they are open to what you have to say and most of them are really great at teaching you. Like, when you question, well why are you doing that or why aren't we doing this. They don't hesitate to give you their rationale. And I think it's a really nice relationship.

Similar to their peers in the MJH MS unit, MJH ICU nurses perceived that some physicians were unreceptive to their input. For instance, Wilma shared a story about a physician who did not want to hear what she had to say until he "allowed" her to talk. Interestingly, neither Wilma nor the Intensivist who witnessed this exchange confronted the offending physician. Recall that caregivers inconsistently confronted others in this unit and the patient/family was not always their primary focus; instead, caregivers tended to do what was beneficial for them individually:

Also, the Middle Eastern ones; I've actually had a physician say to me, "You cannot talk to me unless I allow you to." And I just walked away. Yeah. He was Egyptian. ... One of the Intensivists just looked at me and started, "Okay. You better go and have coffee," and I just walked over and I dealt with what I had to do. So, we have stuff like that. They're trying to change that. And I've nothing against that. I am highly respectful to them, but if I ask you a direct question and it's appropriate towards your patient, and you're going to treat me like that, it's not acceptable.

Tom also shared examples of when he encountered Intensivists who were not receptive when he told them he was unable to obtain a blood pressure. When this occurred, Tom perceived that he was unable to adequately treat the patient's hypotension and as a result, they suffered negative outcomes, such as acute renal failure. Also evident in this example was the nuanced communication that nurses perceived took place between physicians and nurses. Tom shared that he would "only go to the Intensivist" with his concern. He dared not ask another physician, who was assigned to care for the patient, to address this issue even if Tom believed that this would benefit the patient/family. Also present in this example was Tom's inability to create the change necessary to fix the problem. He perceived that he could not influence the change and that nurse leaders were receptive to his input but did not take action based on his input:

We have patients on two different presser drugs and we are still pushing the cuff every 5 minutes.... Or we will have patients on SLED, the bedside dialysis, and we can't get an accurate measurement of the blood pressure, we'll get a question mark. And you have to give the pressers. The only person we go to is our Intensivist and depending on the Intensivist, you may not get your art line. They may just go, "Well, keep trying, or hang another drug, or this kind of thing until something reads." But what am I supposed to chart a question mark? ... Well, I'd be begging my Intensivist and I could get them just about every bit of information, certainly the importance of it. You could state all day long until you are blue in the face but it really depends on your Intensivist. I don't even know if I could even convince a charge nurse or nurse manager to try to convince the Intensivist because if he's not going to do it, he's just not going to do it, unfortunately. The care, the obvious reasons for it you could state all day long; maintaining kidney perfusion and things like that. I've seen some people develop acute renal failure because I didn't know what their blood pressure was for over an hour and a half. I couldn't get anything giving them drugs all day long.

Likewise, Ricki shared that physicians were often unreceptive to the nurses' concern about the patient's hypertension. Ricki believed that ignoring the hypertension was not in the best interests of the patient. However, he dared not bring his concern to another physician because they would acquiesce to what the first physician had told him to do. This was another example of the nuanced communication that occurred between the nurse and physicians in this unit, his inability to create change, and how they inconsistently confronted issues and brought them forth so that they could be resolved:

Sometimes, and we see it a lot, is that these patients are hooked up to the vital signs, for example. And this happens, is that the blood pressure is reading outrageously high. And it seems legit because the numbers are staying high. And you call the physician and they're like, don't treat the vital signs. So, what am I supposed to treat? I mean they're high. And you don't dare ask another physician because now you're just staff splitting, basically. And they will make your life – seemingly - I mean this has never happened to me. I mean, if the doctor says don't, I understand that the blood pressure is 180 and it's been that way for the past whatever, but I don't want you to treat it.

So then as the nurse, my concern is - and now that we know the reputation of the physician is don't treat those vital signs. Well, all right. I'm going to make sure I put it in the chart: the doctor says don't treat. But you don't run to the Intensivist because, one, you just don't do it. You've already asked the one physician. Secondly, he's going to tell you what did that doctor say. And he's going to say, well, then that's what you should do. I have never seen the hospital lose a patient because of what it seems like neglect in the vital signs, but I mean it's a concern when you see a blood pressure of 180, 190 and nothing's being done. And they're complaining of headaches or other things.

Similarly, Dawn perceived that she used “critical thinking” when deciding what information to pass along to and how to approach different physicians. This represents the nuanced communication between nurses and physicians that occurred in this unit:

I have good experience with the physicians here. I've known them for a while. They know me. And we all know our limitations, both them and me. ... And most are very good teachers and very open to new ideas, as long as you're not challenging them. ... Well, they don't like to be challenged. Sometimes if you ask them a question about their order, you're asking for clarification. They think you're challenging their order as if you don't agree with the order. Well it's perception. ...

We're the conduit for the family and for the doctors. Everything kind of comes through us, which in a way is good because we know the patient because we're there for twelve hours with them. We know the families because we build rapport. We know the doctors and we know their personalities. So in a way that's not a bad way to do it but then again, it puts us in the middle because now we're gonna decide what do we disseminate to the family as far as information? What do we tell them? What do we tell the doctors? So it's truly - it goes back to critical thinking of sorts in a different way. Not dealing with medication, but dealing with personalities and information.

Also, Fred shared that physicians were receptive to nurses' input as long as they went about it in “the right way.” Fred perceived that there were nuances in nurse-physician communication and sometimes, physicians were unreceptive to nurses because they did not play the game. This nuanced communication focused on what was best for the individual rather than what was best for the patient/family:

You can only do so much. You can only recommend or suggest so much to a physician or multiple physicians. Usually, I haven't really encountered an issue where I have needed a line, or a test, a procedure that wasn't justified where I have met resistance. ... I have seen issues where other people may have not gotten things, but they might have not gone about it the right way. They may not have the same relationship that I have with the physicians. So, I think it is also nurse specific, too. If you need something and you start demanding it, well right off the bat there is going to be a little resistance there. If you approach it the right way and handle it a certain way, I think you are more likely to get what you are looking for. Regardless, it shouldn't matter though.

Ricki also shared that sometimes patient assignments were made based on who the nurse and physician were so that there was a “better rapport” between them. The nurse-physician communication was nuanced to the point that certain physicians did not respond to certain nurses. The nurses learned how to work around this by assigning

nurses to care for patients who had certain physicians assigned to their care. Recall that this unit inconsistently confronted issues and created change to fix things; so, it is not surprising that they devised a method to work around nurse and physician idiosyncrasies:

Some, and I'm just saying this because it's happened, where some of the nurses will say, "we gave you this patient because this doctor's on the case and we know you have a better rapport with them than somebody else." It's happened a couple of times. And sure enough, it's worked to our advantage. Because why do we want to have somebody that doesn't know this doctor or butts heads with this doctor when we could have somebody try to help manipulate the situation? The person would say something as simple as getting something that we wouldn't normally be able to get to calm him down. And it's happened. I mean, sometimes certain nurses can take care of patients, certain doctor's patients because again, the strength or the alliance with the doctor. It happens.

The MH MS unit operated with the assumption that it was acceptable for physicians and nurses to inconsistently talk with each other about the patient/family. In the MH MS unit, several factors influenced nurse-physician communication and they included: (a) receptiveness of physicians to nurses' input, (b) physicians seeking out nurses, and (c) respectfulness of the physicians towards the nurses. The majority of nurses perceived that physicians were receptive to and sought out nurses' input. However, there were a few physicians that were unreceptive. For example, Pricilla perceived that most physicians were consistently receptive and sought out her input. Pricilla also perceived that a few of the physicians did not treat the nurses respectfully and were unreceptive. Pricilla shared that she felt more comfortable discussing patient/family issues with the physicians who were receptive and respectful. However, she did not state that she withheld or avoided physicians that were unreceptive and/or disrespectful:

The ones I like best are the oncology ones. They are a different breed of people. I don't know, for some of them, they don't listen, some physicians they just kind of grumble at you and talk down to you. But, the oncology ones, they don't. They laugh with you, they listen to you, it's like they want your input and they build a good strong rapport where I don't feel intimidated to say, "Hey, this is what I'm seeing, can we do something about this?" I have a good rapport and I feel very

comfortable in doing that; so, I like that. They know my name. The other ones, I've been there forever, and they don't even know who I am. So, I like that. There isn't anything I dislike about the oncologist. I love the palliative doctors, they're just so compassionate, I just love them. And then there's some, I even like the Hospitalists. There's just a few physicians that are just rude and my hearing is not the best, anyhow, and they're like what, why didn't you hear that, why didn't you get this, I'm like okay I can get it. Just spell it and I've got it. But that's everywhere; you're not going to get away from that. It's a good group though.

Likewise, Cathy perceived that most physicians were receptive to nurses' input but there were a few physicians that were disrespectful. Nurse-physician communication was a vital means to share patient/family information with each other. Recall that Cathy perceived that nurses confronted physicians and if the physician did not respond, they brought their concerns to nurse leaders and they perceived that the issue was dealt with:

I think that they listen to you. You always have some that talk down to you and have them just start yelling out in the middle of the hall. You've seen nurses that have gotten that and you're like, "Oh my God, that's just uncalled for." But I mean for the most part, they respect what we say and what we have to bring to patient care. So, they listen. ... I think physicians look at us pretty highly; they look for us because we are there with them [patient/family] all day. And the doctors, they'll ask questions and I think they just look to us for answers....

Similarly, Barb perceived that most physicians were receptive and responded to nurses' input. Barb believed that this was beneficial because it positively influenced patient/family outcomes when physicians responded to nurses' input. Barb also shared that she did not ask unreceptive physicians questions. However, this theme did not bear out in other nurses' perceptions of their communication and relationship with physicians like it did in the MJH MS unit:

I think we have a good relationship with the physicians on the unit. ... I think being Oncology, you have physicians that want to know what's going on with their patients; that want to be called. We have a lot of cell phone numbers that aren't just answering services; which is, to me, the way it should be - and they care. So, I think we have a pretty good relationship. We can ask questions.... We don't have very many issues. ... They're open to explaining. I like it when you catch something and they listen to you, and it really does make a difference. I mean that's wonderful when that happens. ... I mean, there's some you don't bother to ask, but most of them, yeah, I'd say 90 percent of the doctors are very open.

Paige also perceived that most physicians were receptive to nurses' input and respectful except for a few, which nurses perceived were unreceptive and disrespectful. The receptive physicians were much easier for the nurses to talk to. However, nurses still communicated vital patient/family information to unreceptive disrespectful physicians. Recall that this unit inconsistently confronted physicians but they could create change rather easily. As a result, they did not tend to confront unreceptive physicians but they continued to communicate with them and if they received an unacceptable response, they documented this and took their concerns to nurse leaders who dealt with the issue:

Paige: I think we have some doctors who are...unapproachable. But basically, on a whole, they are wonderful. I can only think of - if you talk to a nurse, there are only a few doctors that all the units will say - same doctors every unit will say are problems.

Kim: What do you guys do with those problem physicians?

Paige: We just tolerate - yeah, business as usual. Oh, God I gotta call this one again, you know? You do call them, you got a problem, you gotta call them. Oh, I gotta call them. Just call them, what's he gonna do? If patient's got a blood pressure issue, you gotta call them. What's he going to say to you? And whatever he says, document; write it down. You call the doctor and he orders something or he doesn't order something. But there are some doctors you can talk to and some you just can't as comfortably because you know that they are going to snap or they are going to bite back or something. So, then there are some that you can kinda casually talk to and pal around with, basically they are good.

The MH ICU operated with the assumption that physicians and nurses consistently talked with each other about the patient/family. In the MH ICU, several factors influenced nurse-physician communication and they included: (a) receptiveness of physicians to nurses' input, (b) physicians seeking out nurses, (c) respectfulness of the physicians towards the nurses, and (d) perceived equality between nurses and physicians. The majority of nurses perceived that physicians were receptive to and sought out nurses' input. For instance, Tony perceived that "98 percent" of the physicians were receptive and heeded nurses' input about the patient/family: "They always get along well, I think. ... Actually, most of them listen to you. ... Overall, 98

percent of the doctors are responsive, they'll listen to you, and give you what you need."

Likewise, Jill perceived that physicians were receptive to nurses' input and responded to their input regarding the patient/family:

They're very supportive. They listen. ... I think just working in the critical care unit, especially the physicians, they know that you spend a lot of time with that patient. They know that you know what that patient needs and so they really listen to you when you come in because they know that you've spent all that time and you're familiar....

Also, Yolanda perceived that physicians sought out nurses to obtain their input regarding the patient/family:

You have the doctors that come in and they want the nurse. ... So the bedside nurse will approach them and they'll be like, "Okay, so how is she doing?" They're so used to us knowing everything about that patient that they rely on us. ... But in our ICU, what do you mean she's not here? Well, I need to talk to her. I need her to tell me how she's doing today.

Similarly, Claire perceived that physicians were receptive to nurses' input and respectful towards nurses. Claire shared that it was very rare to encounter a physician who was disrespectful to the nurses. The focus on the patient/family was evident in the ability of the nurses and physician to discuss care options. Also, the nurses-physician communication that took place in the unit facilitated the nurses' ability to use evidence in their practice because physicians communicated research findings in a manner that conveyed that they genuinely cared for the nurses:

I can speak to physicians that we work most with. I don't think there's anything I don't like about them. They are very helpful. They treat the nurses with respect. ... I had a physician that was very abrupt with me a couple a weeks ago and it was not from the group of physicians we mostly work with. It was a GI physician that doesn't come to the hospital as often and I was just like - you know what's nice? It's so not normal. You don't get that snippiness. I can call the physicians when I need to. I can talk to the physicians as a professional. They treat me well. I think they essentially treat everyone well. And even if you make a mistake, you're not being yelled at or berated. If you need to ask a question, you can ask the question. Why are you doing it that way? Or, why wouldn't we do something different? And it's much more open discussion. ... There's one of the pulmonologists that's not in the group we see all the time, he'll tell all kinds - three reasons why not to ever give vitamin K IV. I want to protect you. And it's just genuinely caring. So I really think it's a very good environment. And it's very unique that you will have someone who is even snippy with you.

Yolanda also perceived that physicians respected the MH ICU nurses for their knowledge about the needs of the patient/family. MH ICU nurses perceived that their communication and relationship with the physicians was unique and beneficial for the patient/family:

You can see the respect. ... We have such a good - they respect us. And they wholeheartedly respect us and respect everything that we have, especially the Intensivists more so than this doctor coming in or that doctor coming in. Respect everything that we have to offer as far as plan of care and maybe we should do this. And they'll say, "You know that's a really good idea, but." I mean really truly they might not agree with you, but they thank you wholeheartedly for the offer and for the thought. ... You work with them just so well.

Similarly, Betty perceived that the physicians respected the nurses and were receptive to their input: "They have a high respect for us in there. They listen. If I say I got a problem, they come immediately."

Some of the MH ICU nurses perceived that physicians were their coworkers. This theme did not emerge from any other unit. For instance, Betty perceived that the Unit Manager and physicians were equals with the staff nurse. This created an environment in which the issues of power were greatly reduced and this influenced nurses' ability to confront physicians and to create change necessary to improve care outcomes. Being on equal footing also facilitated everyone to focus on what was best for the patient/family and not what was best for him or her:

She's [Nurse Manager] not like up here (raises hand above her head). She's part of the group. It's like she actually is our boss but everybody feels like they're on an equal plane. The same thing with the doctors. I took a young girl, because she thought she'd like to be a nurse. ... We went through rounds and she said, "I always thought the doctor was your boss." And I said, "Well, no. I said the boss is your patient. Not the doctors." I said, "He's your coworker."

Likewise, Yolanda perceived that the relationship that the MH ICU nurses have with the physicians was unique because nurses perceived physicians to be their coworkers:

The other day we were just talking about the relationship that we have with the physicians and trying to describe it to maybe someone that was coming through;

through just to see what the ICU was like or critical care internship program. Explaining the relationship that we have with the physicians. And what did she say? She said they're not our boss. They're our coworkers.

Similarly, Ethel perceived that nurses and physicians were "on the same level" because physicians were receptive to nurses' input regarding how to best care for the patient/family. Ethel shared that this was different than her experience as a floor nurse where she perceived that physicians did not collaborate with the nurses:

It's excellent. Like really and truly, coming from working on the floor for so long to the Intensive Care Unit, I feel like I'm on the same level with them. I mean they will listen to my thoughts, to what I feel the patient needs. And a lot of times they'll say, yeah, you're right, go ahead, do that. And I really feel like it's a collaborative effort.

Summary of nurse-physician communication. The effectiveness of nurse-physician communication influenced the nurses' ability to incorporate patient/family preferences into care decisions. Also, how well nurses and physicians communicated regarding the care of patient/families reflected how focused they were on doing what was best and right for the patient/family. The majority of nurses in this studied perceived that most physicians were receptive to their input and treated them respectfully. Therefore, they perceived that they conveyed patient/family preferences to the physician for consideration. However, the strength of this perception varied across units.

The MJH MS unit nurses perceived that some physicians were unreceptive to their input and/or were disrespectful towards them. Occasionally the MJH MS unit nurses accepted disrespectful physician behavior until multiple nurses complained of the same treatment. Then, they brought their concerns to nurse leaders and it was perceived that the physician's behavior did not change. Recall that this unit inconsistently confronted other caregivers and they could not create the necessary change to fix things. Also, the MJH MS unit nurses exhibited unique behavior when they encountered unreceptive and/or disrespectful physicians: they avoided and/or withheld pertinent patient/family information from them. This undercurrent of ineffective nurse-

physician communication created an environment in which both nurses and physicians inconsistently focused on what was best and right for the patient/family. Decisions were sometimes made that benefited caregivers rather than what was best or right for the patient/family.

The MJH ICU nurses also perceived that some physicians were unreceptive to their input and/or disrespectful towards them. However, there were no data to suggest that MJH ICU nurses withheld pertinent patient/family information from physicians. Recall that this unit inconsistently confronted physicians but they could create some change. Also, issues of power were apparent when nurses decided to confront physicians. In light of these circumstances, the MJH ICU developed nuanced nurse-physician communication. How and when nurses communicated with physicians was based on physician personalities and idiosyncrasies. Again, this occasionally took their focus away from what was best and right for the patient/family to what was best for the individual. Interestingly, MJH ICU nurses did not overtly mention that physicians respected them like the MH ICU nurses shared; however, there was a sense of physician respect in some of the nurses' examples.

The MH MS unit nurses also perceived that some physicians were unreceptive to their input and disrespectful towards them. However, unlike their peers in the MJH MS unit, MH MS unit nurses did not withhold pertinent information from unreceptive and/or disrespectful physicians. Recall that this unit also inconsistently confronted physicians but they could create the necessary change to fix things. Also, they operated with the assumption that the patient/family were their "center." When they encountered unreceptive and/or disrespectful physicians, they would communicate with them and they took their concerns to nurse leaders. MH MS unit nurses perceived that these physician issues were addressed.

In contrast to the other units, the MH ICU operated with the assumption that nurse-physician communication regarding the patient/family consistently occurred. This communication was marked by physician receptiveness, mutual respectfulness, and pt/family centeredness. The MH ICU nurses perceived that physicians were their equals. This was a unique finding germane to this unit.

Nurses' perception of physician-physician communication. The quality of physician-to-physician communication regarding patient/family care influenced the intensity of the caregiver's focus on doing what was best and right for the patient/family. Nurses' perception of the physicians' ability to communicate with each other varied across the units. The MJH MS unit operated with the assumption that it was okay for physicians to inconsistently communicate with each other regarding patient/family issues. For example, Michelle perceived that physicians did not communicate directly with each other. Instead, they expected the nurse to assume this function. MJH MS unit nurses have performed this task for a very long time and they often referred to it as "playing the physician's secretary." Michelle believed that this was not beneficial for the patient/family because she did not have the same knowledge base as the physicians (behavioral belief). Also, performing this function took a lot of her time, which she perceived was in short supply (control belief). Recall that nurses from this unit inconsistently confronted physicians, viewed physicians as powerful, and were not able to create change to fix things. The environment that was created allowed for this unacceptable behavior to continue even though it was perceived to be unbeneficial for the patient/family; caregivers were not always focused on doing what was best and right for the patient/family:

And nurses have become the communicating thing - they have to communicate with all the other doctors, which is just ridiculous. They should call each other because they know what they're talking about. But, we find ourselves calling doctor after doctor every day, saying, "Oh! This one wants you to do this. Is that okay?" And then, if he has something to say back - and that can be very

overwhelming, especially on that level of care, where they're getting this done stat and that done stat. ... It's, it's insane - it's insane! And I don't know what it is, or how it started, or why it is even like that. But, we'll get orders all of the time, "Call doctor so-and-so to see if this patient can do this." It's like, "You call them." Maybe, it's because a lot of them don't communicate with each other, I don't know.

Likewise, Francesca shared that nurses "played the physician's secretary" and she believed that this was unbeneficial for the patient/family and consumed too much of her time. Given the assumptions that this unit operated with, Francesca was unable to see how this could be improved:

Francesca: I don't like it when doctors don't communicate. That's like a huge thing for me.

Kim: They don't communicate with the nurse or each other?

Francesca: With each other.

Kim: Yeah, I hear that's a problem.

Francesca: Oh, it's a huge problem! And we're their secretary. Now, I'm not on their same level of expertise. This one will tell me, "Okay, call this doctor and find out blah-blah-blah." One time I called five doctors! I had to call five doctors to get one answer because this one said no, call that doctor, no call the other doctor, blah-blah-blah. I was really angry. ... I think it would be an obvious thing that they're peers - why wouldn't you want to talk to your peer about a person that you're giving care because you could talk your own jargon or whatever. I don't see why they would want to go through somebody who, in their eyes, isn't as smart. We might be, but not in the doctor's eyes. And it's true, they have a level of degree that I don't have. They've had schooling for God knows how many years, so why would you want to have a nurse and then yell about it because it wasn't done right? That's a big pet peeve of mine, I don't like it and I don't know how it could change, I really don't.

Kim: From what I understand, this has been the norm for years.

Francesca: It's horrible! You know, I had a doctor once tell me, he said there's such a huge problem that doctors don't communicate to each other any more. ... It's crazy! It's really a bad thing because stuff could be missed. That's like...Chinese telephone - and it never comes to the end right. Then, something gets messed up and it's wrong and then they have to come in and talk with them anyway. I know that's really a problem.

Similarly, Grace shared that the expectation to "play the physician's secretary" was enforced by nurse leaders. Grace shared a story where she was reprimanded by a nurse

leader for not “playing the physician’s secretary” as a physician had ordered. Grace’s story exemplified that nurses were not listened to, that they could not create change necessary to improve something, that physicians were powerful, and that they inconsistently confronted other caregivers even when the potential outcome for the patient/family was believed to be unbeneficial:

This is where we play the physician’s secretary. And you know what? ... For what it’s worth...a doctor did that and if he had read the note, he would have had his answer and I didn't need to call the other physician for him. ... But he wrote it on there - to call so-and-so - and I DIDN'T CALL THE DOCTOR! And wouldn't you know, the next day that doctor complained to our supervisor and the supervisor came to me, “that’s a doctor’s order, you have to follow the doctor’s order.” Never forget that. So what do you think I do now? Follow the doctor’s order. I’m like it’s such a no brainer; it’s just annoying. It is. ... I think this doctor was just being nasty to me because he went out of his way to complain to the supervisor the next day about it. But then came to me, I mean you get a superior telling you, you didn’t follow a doctor’s order like you’re supposed to. And why didn’t he just call and I said why didn’t he, it was in the chart, why didn’t he just call him. It seemed very practical to me.

One of the last nurses to be interviewed from the MJH MS unit shared that currently, some nurses attempted to improve the communication between physicians. There was no concerted unit-level effort to improve this but it was done on an individual nurse level. When a rounding physician requested that the nurse call another physician, the individual nurse got out their cell phone, called the physician that the physician wanted to speak with and handed them the phone so that they could talk to each other. Lucy perceived that this was beneficial for both the patient/family and the nurse:

Kim: Your peers that I have talked to have mentioned that they don’t like to play what they call the doctor’s secretary. Have you experienced this?

Lucy: Yes. More and more now they're having that physician call them. Here's my cell phone - have that physician call me and - which is so - I've had that more and more now.

Kim: How do you think that change came about?

Lucy: I'm not sure. But it's wonderful, because otherwise I'd have to actually stop what I'm doing, make sure I go through and get to know what's going on with their history and physical, know what they've been going through since they're here. It's a little time consuming because you don't always have the time to go

and get into the knitty gritty; you get the overview. ... So, it is a little bit difficult, because if they ask you a question you better be prepared with the whole picture. So, it's nicer when they can talk to each other. They know what they want. They know what they're looking for. I think its [unintelligible word] and then they each have been seeing the patient so I think that's the wisest thing to do. ... Just telling - they come on the floor and they'll - kind of silly, I don't know why they can't call, but I'm still making the call, and then I have to call and then I get the phone and bring them my cell phone. So I guess we could eliminate that, yeah; I still don't understand why I have to be the go between – why they don't call directly.

The MJH ICU also operated with the assumption that it was okay for physicians to inconsistently communicate with each other regarding patient/family issues. However, this perception was not as evident as it was in the MJH MS unit. For example, Nancy shared that physician-to-physician communication about the patient/family's care was lacking. She believed this was not beneficial for the patient/family or the nurse. Recall that this unit inconsistently confronted other caregivers and they could create some change. In this unit, nurses and physicians were not consistently focused on doing what was best and right for the patient/family. Nancy shared that she attempted to improve this situation by getting the physician that the rounding physician wanted to talk to. Like the MJH MS unit, the data did not support that there was a concerted unit-level effort to improve physician-to-physician communication:

The hardest thing I think with physicians is for them to communicate amongst themselves. That's my biggest - that's my only problem really with doctors. Is then because like I said, you will have all these specialties; they put you in charge of, well, tell Dr. So-and-so this and then you tell Dr. So-and-so that and they are like why aren't they? I don't know why. I am not a go-between. I think the communication amongst themselves can improve especially when you have all these disciplines on one person. They need to communicate and coordinate amongst themselves - what each goal is going to be. I think that could improve. ... It's a conversation you shouldn't be part of. I don't know why they are doing this. ... Or, well I know, and it happens once in a while, if I happen to be listening to a person tell me something. Well, tell Dr. - oh well they are right over here, I will get them or here, I will get them on the phone. I have done that kind of thing before because I don't want to be the go between. ... It's like the game telephone; what's it going to end up at the end of the line? ... And sometimes it is like that; you totally get a different end report of what it started out to be. Physicians should just talk to physicians. That's the way it should be.

Likewise, Ricki perceived that physicians did not consistently talk with each other regarding patient/family care. Instead, they expected the nurse to be the intermediary:

Directly? No. They don't, they'll wait until they run into them, there's no reason to call them unless there's an emergency situation - absolutely if it's an emergency situation. ... But for the most part if it's something that the Intensivist can handle or has an opinion on, like check with nephrology regarding his lab values, how they want to manage it. They're not going to call directly; they're going to ask us to call them and let them know, inform that physician this is what's happening and see what they say.

Ricki believed that it was beneficial for the patient/family when the nurse called the other physicians because nurses, unlike the Intensivists, documented everything. At the same time, Ricki believed that calling physicians took up too much of his time:

Oh, it's a little bit of control because at least we get to make the call. ... The thing is that he [Intensivist] may hear something, "Oh, that's a great idea," but doesn't write any orders to it. At least the only good thing is that we hear it, we write it down. We'll write it as order, whatever the case may be. It kind of helps us because then it's a little bit in our control. But the problem is, you've got to make these calls. And, it's not like right off the bat; you've got to drop everything and make the call. You throw it in the secretary lap, they call, and the next thing you know, you're talking to the doc, hopefully. A lot of times you just have to drop - if it's important but not emergent, you have to kind of drop the doc's name that's asking to talk to them and that way they'll call back quicker.

Ricki shared that sometimes physicians called each other directly but it occurred much to infrequently on the unit:

It's just funny because they have their [phone] numbers. The neurologist had access to speaking to the cardiologist on last night's case and it was kind of important because two systems were not working hand-in-hand; there were things going on. So, she called the doctor directly. It can happen. It does happen. It just doesn't happen frequently enough, I think. ... Some of them are good like that. They'd rather talk directly to the physician because then they have an idea. ... But for the most part, they can communicate well if they chose to do so without our assistance.

Unlike their MJH peers, the MH MS unit nurses that were interviewed rarely mentioned that they had concerns regarding physician-physician communication. In light of the paucity of data on this topic from the MH MS unit, no assumption could be made regarding physician-physician communication. However, there were two opposing examples of physician-to-physician communication from this unit. One nurse perceived

that physician-to-physician communication was lacking and one perceived that it was present. Debbie perceived that at times physician-to-physician communication was lacking. Interestingly, Debbie perceived that physicians could use the nurse or primary physician as an intermediary more frequently in order to improve the communication between caregivers. This was in direct opposition with the MJH nurses who perceived that physicians should always talk to physicians. Recall that MH MS unit nurses believed that the patient/family was their “center” so doing anything that benefited the patient, even though it may cost them, was perceived to be good:

And communication there [between physicians] sometimes I think is a little lacking. ...I know they go from hospital to hospital to office or wherever. Getting two or three physicians in one place at one time might be difficult. But relaying that information onto a nurse or primary physician who can then help relay it to the other physicians who need to be involved. Sometimes I think that could be better.

On the other hand, Cathy shared a story where two physicians provided conflicting information to the patient/family regarding the patient’s prognosis. The primary physician confronted the physician who provided the conflicting information and asked them to talk to the family and retract their information. The second physician complied. Recall that in this unit it was easier to confront other caregivers and they operated with the assumption that the patient/family was their “center:”

There was a case...yesterday, I think two doctors were telling the family; it was a huge family of an alcoholic patient. They were telling him that he was going to die. He was completely like a highlighter yellow, head-to-toe jaundice. His liver was shot. So, they [family] wanted him to have a new liver, but he wouldn’t be accepted into it because he won’t stop drinking. And they were contemplating putting him in the hospice. So another doctor comes in and tells him, “Well maybe he can [have a liver transplant].” So this doctor was giving them hope and the other doctor, they were butting heads. The one doctor [the first doctor] said, “You need to go tell the family this: that you’re wrong.” So, the [second] doctor talked with the family. It was actually interesting entertainment yesterday.

The MH ICU operated with the assumption that physicians consistently communicated with each other about the patient/family’s care. This was not surprising given that this unit operated with the assumption that the patient/family was their “boss.”

For instance, Tony shared that physicians did communicate effectively with each other regarding patient/family issues:

They do talk to each other. And we are not put in the middle. The only time they seem to do that is specifically if somebody is transferring out. They'll say well, it's okay with me if it's okay with cardiac, pulmonary, GI, and ID. So then, you got to call each one separately...and make sure it's all right. I think they communicate very well. Some of them don't [face-to-face] - they're as legible in their progress notes as possible, so that's good. They see each other; I'm sure in their physicians' lounge or in the hallway or at another patient's chart or they may discuss another patient while they're doing whatever.

Similarly, Ethel shared that when the Intensivist questions an order written by a specialist, they will call them directly. The opposite occurred in the MJH ICU; the nurses were expected to contact the physician and ask for clarification. Again, the focus on doing what was best and right for the patient/family was evident:

Typically, the Intensivist is the one that orchestrates everything. And then he's the one that dictates what is done. But the other sub specialties will write orders like infectious diseases, they will write the antibiotics. Sometimes the Intensivist will say I don't think that that's appropriate; he'll call and see about that antibiotic.

Likewise, Claire perceived that physicians communicated and collaborated to provide patient care. This was a natural extension of this unit's assumption that they did what was best and right for the patient/family. Also, Claire believed that this was beneficial for the patient/family:

Excellent in comparison; I came from an environment, where it had gotten to the point that the attending physician in the intensive care unit was the only one that could actually write the orders. So, say they had a GI consultant and the GI consultant said he wanted IV Protonix versus PO Prilosec. You would have to get the attending to say okay and go about that. Toes sometimes get a little - toes and noses get a little out of whack in this. But rarely in this environment. Essentially, the kidney doctor will write for DNR status if he talks to the patient. And, so they'll write their full page of orders that include their normal kidney stuff but also blood pressure medications and IV fluids and potassium replacement; whatever it might be. But there's a little less ego involved [at this hospital] in "this is my patient."

Summary of nurses' perception of physician-physician communication.

Nurses' perception of the quality of physician-to-physician communication varied across the units. The MJH MS unit nurses perceived that physician-to-physician communication

was lacking. Many assumptions combined in this unit to create an environment in which nurses were expected to follow physician's orders even though they did not believe that this was beneficial for the patient/family. The MJH ICU nurses also perceived that physician-to-physician communication was lacking. However, the perception was less intense than the MJH MS unit. There were not enough data to support an assumption for the MH MS unit. However, the MH ICU nurses perceived that physicians readily communicated with each other. Recall that the MH ICU believed that the patient/family was their "boss" and they operated with the assumption that they did what was best and right for the patient/family.

Nurses' perception of physician-patient/family communication. EBP, as defined in this study, is the integration of the best evidence, patient/family preferences, and clinical expertise when making clinical decisions. In order to include patient/families in healthcare decisions, communication between caregivers (nurses and physicians) and the patient/family is vital. When caregivers did not communicate with patient/families, it would be impossible for the caregivers to include them healthcare decisions. Nurses' cognitive beliefs towards informing and involving the patient/family in care decisions were previously mentioned. In this section, nurses' perception of physician-patient/family communication will be presented.

The MJH MS unit operated with the assumption that it was okay for physicians to inconsistently talk with the patient/family. The majority of nurses perceived that there was a lack of communication between the physician and the patient/family. For example, Cindy shared that sometimes patient/families complained that their physician was not listening to them. When communication between the physician and the patient/family was not present, the patient/family perceived that the physician was not "listening" to them. This made it more challenging to incorporate patient/family preferences into care decisions:

A lot of times we really don't know that kind of stuff until the patient or the family might communicate it with us. They might say something to the nature of "I feel like such and such doctor is not listening" and then they make a formal complaint or something like that.

Similarly, Francesca shared that some physicians did not listen to the patient/family's input:

No, I think that's, I think – yeah most of the time yes. ... Probably most of the time, they are good like that. There are a few doctors that go in and say something and I know they're thinking like whatever [and not listening to the patient].

Also, some MJH MS unit nurses perceived that patients underwent procedures/treatments without fully understanding the reason(s) for them. From the nurses' perspective, this reflected inadequate communication between the physician and the patient/family. For instance, Silvia perceived that patients did not always understand what was being done to them. Evident in Silvia's example was the lack of physician communication with the patient/family regarding a scheduled procedure. When a physician provided information about the procedure to the patient/family outside of the procedure room, there was inadequate time for the patient/family to process the information, ask questions, or seek alternatives. Also, it appeared that the decision to perform the procedure was made without patient/family input because they are unaware what was occurring:

Lots of times I have to explain if they are going down and they haven't seen the doctor yet. They have to sign a permit; they don't know what they are going to do. And I say, "You don't have to sign this permit now, you can sign it when you get down there. The doctor's going to talk to you before you go for this procedure and he answers all your questions because I can't answer them right here."... Things happen to patients without their understanding, certainly they do – lots of times.

Besides that, Chris shared that a certain physician consistently ordered the same procedure on all patients if they needed it or not. Again, apparent in this scenario was the lack of communication between the physician and the patient/family because the physician had already decided that this procedure was to be done regardless of

patient/family preferences. Also, this scenario illuminated that this physician inconsistently incorporated evidence into his practice because all patients, warranted or not, endured the same procedure. Not surprisingly, Chris dealt with this situation by “diplomatically” informing the patient/family that they did not need to consent for the procedure. Recall that this unit inconsistently confronted caregivers, inconsistently followed evidence, inconsistently incorporated patient/family preferences into care decisions, and nurses could not create change to improve care:

Chris: There is a doctor on staff that you know if he comes in on consult that he is going to write for him to do a procedure the next day. Always happens; so you can know right away that it is going to happen. And, just realize that sometimes that is really not necessary.

Kim: What do you do with that situation?

Chris: Well, explain to the patient that this is what the doctor has asked for, but the doctor can't do it without your consent. Try and be as diplomatic as possible to let them know it is okay to say no without saying the doctor, I don't think, is doing the right thing.

Some MJH MS unit nurses believed that the lack of communication between the physician and the patient/family was unbeneficial for the patient/family. They attempted to remedy the lack of communication by reviewing the chart with the patient/family when they complained that they did not know what was happening. For example, Lucy shared that often the patient/family did not know the plan of care. In this situation Lucy filled in for the physicians' lack of communication with the patient/family and explained the plan. Recall that MJH MS unit nurses believed that informing the patient/family was very beneficial but incorporating their input was not on their radar:

A lot of times they're [patient/family], "I don't know what's going on. No one's talked to us." You know what? Let's go over the chart together. Let's look at the progress notes. Let's see; let's get behind the mind of what all the physicians are saying. ... I'll say this is what they're - and there's always a plan and this is what's going on. I say okay, now you understand what they're looking for, why they're ordering the tests. You know what to expect. And they'll [physicians] say outlook is guarded. What does that mean? And so then I take the time to go over the results with them and they go, "okay, now I know what's going on." We can't give them the chart but I can go over the chart with you and I can tell you what's going

on. ... They're like they can't thank you enough when they get that, yeah. That's what they want.

Likewise, Grace shared that she filled in for the lack of communication between the physician and the patient/family by reviewing the chart. Evident in this example was the lack of informing and involving patient/families in care decisions by physicians:

You bring the whole chart over, physically, to the family. Rarely do they understand what's in there anyway because it's; we hardly understand it. Okay this says this, okay let's go from the beginning, okay he came in, and this is what happened, blah, blah, blah. We gave him blah, blah, blah. He's still having a problem with this. This is what they're doing. You read the orders. It looks like they want to do this now. ... Or they're going to do this study tomorrow and depending on how she does with that they could cap it.

The MJH ICU also operated with the assumption that it was acceptable for physicians to inconsistently talk with the patient/family. Sarah provided an example of when physician- and nurse-patient/family communication were lacking. The lack of communication made it difficult to inform patient/families and incorporate their preferences into care decisions. Recall the forces at work in this unit: caregivers did not focus on doing what was best and right for the patient/family, physicians were powerful, nurses did not involve patient/families in care decisions, and nurses could inconsistently create change. It appeared that physician beliefs and behaviors paralleled nurses' beliefs and behaviors:

I think, something that would help out with practice better, specifically to us - better communication with families. You try as a nurse but ultimately, if the physician isn't there to kind of back up your word, it doesn't mean anything. ... There was an incident one time, there's family asking to speak to the physician; it had been over an 8-hour period that we constantly, I was telling the physician, "Hey, the family wants to talk to you." And they [family] felt like I was personally just blowing them off. They ultimately didn't say anything to me but went to Administration, the manager came and talked to them, and ultimately the problem became that they were upset because the physician wasn't talking to them.

Likewise, Wilma perceived that both nurses and physicians inconsistently communicated with the patient/family. Consequently, the patient/families were angry because they did not know what was happening to them and were not involved in care decisions. Also,

Wilma perceived that patient/families were “told” by physicians that they had to have a certain test or procedure. Not surprisingly, Wilma, like Chris from the MJH MS unit, dealt with this situation by encouraging the patient/family member to tell the physician that they refused to have the test. It was unknown if the patient/family member actually did this. Recall the many forces at work in this unit that created an environment in which it was okay to inconsistently inform and involve the patient/family in care decisions:

Wilma: I think it's a big communication - because they [patient/families] don't know what's going on. And I think a lot of nurses, same thing - it's not that they may not want to, but they're so stressed. ... But people are more informed. They got the Internet. They want information. They're not stupid. ... And now again, with litigation.... ... Why do you think you have so many consents? Because people weren't informed or told their rights. ... We'll have situations where the doctors are horrible - especially in some cultures [of the patient/family]. They're doing everything to them. But if you really get across to them [family] that, look, coding them and breaking and ripping their body or they're brain dead...make it not gory, but just basic common sense; nobody wants a family member to suffer. They want honesty. And I don't see that, even today, with everything. You have some docs that are very good. You have some that are not. ... They [physicians] do test some patients and they don't need it. They [physicians] tell them [patient/family], "Oh, you need it." And so when I see things that are not right, I will intervene and say, "It's simple. Do you understand that this test?" Same thing if the patients say to me, "Well, I just had this, got three of these, and they're all normal." And I'll say, "Well, then do you understand that you don't need to have it then? Why are you consenting to it?" And it's just as simple as that. And they'll go, "You know, I don't know because the doctor said that I had to," or, "He told my mother, this." ... I'll give you a perfect example where they're really angry. This family is as mad as hell. ... And it's just as simple as they didn't listen to what they were trying to say.

Kim: The caregivers weren't listening to the family?

Wilma: Correct, correct. Or it may have been the physician who dropped the ball, so now the person is very angry. They didn't return their call or didn't take the time. So, things like that. ... I'm not the only one; a lot of the nurses do, too. And even with the physician, sometimes when it's a physician who just not wanting to talk to the family.

Similarly, Ricki perceived that physician-patient/family communication was lacking. Ricki shared the reasons for his perception and they included: (a) patient/families often did not know the plan of care, (b) patient/families did not know who their physicians were, and (c) patient/families disagreed with the physician's plan of care. To resolve these issues,

Ricki shared that he worked around the physician that did not communicate by finding someone other person, such as a respiratory therapist, or himself to talk to the patient/family. When this did not satisfy the family, Ricki shared that nurse leaders got involved and this was a frequent occurrence. Not surprisingly, when the family did not know who the physician was, Ricki pointed out who they were to the family and the family was encouraged to approach the physician. The forces at work in this unit created an environment in which doing what was best and right for patient/families was not the focus of caregivers:

Kim: How do you get to understand or know what the patient and the family want to have done?

Rick: Well, it may not always be the same thing that the doctor wants done.

Kim: Tell me about that.

Ricki: Sometimes, you might have a patient that comes in from another hospital because of that reason. ... I've seen that on several occasions. And then they come here and they don't totally agree with the doctors, what the doctor's doing. ... In our ICU, we do rounds every day, so, we get to bounce things off, and sometimes the doctors, they bounce things off other doctors if they happen to be around. So it's not always in agreement; even the doctors don't always agree but sometimes - somehow, someway it works. I mean, we [nurses] and the patients, the families, may not agree but that's where the docs have to talk to them - not just the nurses.

Kim: How do you resolve that disagreement?

Ricki: Well, I mean, it's a chain of command really. I mean if we can't do it, then the doctors should be working it out, too. ... Our doctors can take care of that, but sometimes they, for whatever reason; they might not be able to have the time to talk to a family. So, you bring in various people to do it. And then sometimes it gets so bad you have to bring in the director to try and keep the peace to try to make them [family] understand. ... It happens. It happens a lot.

Kim: Do you have an example of that?

Ricki: You've got a patient who's unresponsive and they want a neurologist on the case. And the neurologist is maybe not so forward with approaching the family to find out whatever information they need to find out. But funny or not, as it is, I will put the doctor on the spot. If the family's here and the doc's here, and he's trying to avoid them, I'll tell the patient [and family], "That's your doctor right there." And they'll walk up to them and talk to them and ask them the questions that they [physicians] probably should be helping answer, but for whatever

reasons that does not happen. ... So I mean, there are those that want to and can and there are those that try to avoid it and try to move on. You'll have instances in which sometimes the patient's families would say, "I don't even know who the neurologist is," or "I don't even know who the pulmonologist is." Then you look and they've been seeing this patient but whether they've approached them [family], I don't know. How would I know? ...

Kim: How do you think you could fix this?

Ricki: It's just a matter of keeping them informed. I think a part of it is that the families feel that they're not informed enough.

Kim: Right, and how could you make that happen, that they get informed, that all the physicians talk to them, communication improves?

Ricki: Well, well, part of the problem is that you have too many specialists. I mean there's nothing you can do. ... And all you can do it seems, or what happens is that we chase the specialist.

The MH MS unit also operated with the assumption that it was acceptable for physicians to inconsistently talk with the patient/family. However, MH MS unit nurses' perception was the opposite of the MJH nurses' in that they perceived that most physicians communicated with patient/families and incorporated their preferences into care decisions. For example, Debbie perceived that most physicians talked to the patient/family, provided them with options, and incorporated patient/family preferences into care decisions. Also, Debbie perceived that "patient-centeredness" was a core hospital value:

Debbie: I think a lot of the physicians we work with are really good at explaining all the options and then just taking into effect what the patient wants. And then we get the families involved a lot, too. ...

Kim: Do you feel that patient-centeredness is there most of the time, not a lot of the time?

Debbie: I'd say most of the time. ... It may be a complicated patient. It may be a bad day. But I think most of the time people are at least trying for that. It may not end up that way, but people, between physicians and nurses; everybody's trying to get the best for the patient.

Kim: Do you think that's a value in your hospital that you do the best for the patient?

Debbie: Yeah. Especially the higher ups. But I think everybody feels that way. I think you have to - to be in healthcare. If you don't feel that way, then you shouldn't be here.

Similarly, Barb perceived that most physicians communicated with patient/families and incorporated their preferences:

I would say mostly, but of course, there are exceptions. You have doctors that don't spend as much time with a patient. ... But I think patients are really informed now. And everybody gets on the Internet and everybody has a lot of questions for the physicians. So I think, yes, they do have something to say.

Likewise, Cathy perceived that most physicians communicated and provided options to the patient/family and allowed the patient/family to make their own decisions. The forces at work in this unit created an environment in which caregivers fairly consistently did what was best and right for the patient, which included the patient/family in care decisions:

I think most of them [doctors], for the most part, have good bedside manners. ... I think our oncology doctors...everybody loves them.... Then Dr. Blank, their team is excellent. He has a couple people to his team that just kind of follow him; he's got a Chaplain with him. I've never heard any complaints about them and they're just very sensitive and good at what they do. ... The doctors will come up to the bedside and explain this is why you have to have the surgery. ... One time a renal doctor was up talking to a patient and she was refusing to take some of the IV potassium because her potassium was low. He explained to her that she could have a heart attack; because I think her potassium was so low, like the lowest I've ever seen, it was one point something. And he told her that in his entire career, he has not seen one lower than yours and that patient died. So, he was telling her, trying to convince her but she just wouldn't. But, it's things like that that they know and are trying to tell the patient that that is what happens if you don't do this or things like that. Like if you don't have the surgery, here are your other options.

In contrast to the other units, the MH ICU operated with the assumption that physicians consistently communicated with the patient/family and included their preferences into care decisions. Recall that the majority of MH ICU nurses perceived that the patient/family was their "boss." Also, this unit allowed families to attend daily rounds and had no restrictions on visiting hours. According to Claire, the forces at work in this unit created a "culture" in which physicians communicated with patient/families

and incorporated their input. Claire shared that this was different from her experience at another hospital:

I think that in comparison to my prior experiences, the doctors not only will talk to me about these things, but they take more time discussing it with patients. The physicians themselves – there's much more of a culture of discussing things with patient's families and the patient and making sure that they are doing what the patient wants to do. I think some are better than others, but I think that my experience previously, there wasn't as much. There were so many doctors involved that everyone kinda of let somebody else do it.

Likewise, Ethel perceived that physicians communicated with the patient/family and incorporated their preferences:

The doctors will set up meetings to meet with the families. They're welcome to come out while we're doing rounds and ask questions. They don't usually attend rounds because a lot of times when we do rounds they know that the doctor will come back and spend more time with them. ... But yeah, it's a very open environment for the family. ... We always try to do what the family wants. ... But we really take that to heart and listen to what they have to say and even the doctors will meet with them.

Betty shared that a certain physician sometimes did not incorporate patient/family preferences into care decisions. Betty shared a story in which she advocated for a patient/family with this physician until he did follow their wishes. No other nurse in any of the other units shared such a powerful example of when they advocated so that what was best and right for the patient/family occurred. The forces at work in this unit (nurses confronted physicians, nurses created change, and patient/family centeredness) facilitated Betty's ability to provide patient/family-centered care:

I know Dr. Blank and we have a very high respect for one another, but he is one that will push beyond what patients or families want. And I will have to step in and say they're done. They want hospice. They want to go home and this decision - um, I'm thinking of one particular patient and she did fight. She fought for ten years. She fought this cancer and she's 80 something years old and the cancer came back and it went everywhere. And I needed to put a feeding tube in her and she said, "no." And I said, "hunny, if you're going to fight the fight - if you still want to fight the fight, we've got to get you nutrition." And she wanted to think about it and she said, "Yes, I still want to fight." So, I said, "okay." So, I go to put the small bowel tube in and I got it in. And she looked at me and says, "I don't want to fight the fight no more. I want to go home."

And the doctor came through on rounds and I told him and he was aggravated and he's like, "Well, okay then, we can transfer her out." I said, "No,

we are not transferring her out. I said the husband has not been in yet. He has not heard her say these words. We're not sending her up to another floor with brand new nurses where nobody knows them. They've been here for a week now. They're comfortable. She needs to stay." He says, "all right." So, he goes on.

And then the husband comes in and I told him, "She's got something to tell you." And she told him and he told me, "Well, she's just having a low day. She's going to want to fight tomorrow." I'm like maybe, maybe so. Well, let's wait and see. So, the next day I got in there and I said, "Now Tricia, yesterday you said you were done fighting this fight. Do you feel like fighting the fight?" She said, "Nope. I want to go home." I said okay. So her husband came in, she told him that, and here comes Dr. Blank rounding again. And I'm like, "Okay, she's going home with hospice today." He's like, "Well, I'm not happy she's still here." And I said, "Well, they're happy she's still here. And this is the worst time in their life right now. They've been married 60 something years and we're going to handle this a certain way." He goes, "Well, I want her out of here by five." I said, "She'll be out of here at 3:30 doctor - bye-bye" - and at 3:30 - there she went.

And I'll be dag-gone - I didn't get to say goodbye to her because you're doing all this paperwork and have the paramedic guys getting her loaded up - they whisk her off. So, I called that night and I'm like I didn't get to say goodbye and I felt bad because we've been together for many days and a very intimate time in their life. So, they put the phone up to her ear and I told her that I hope she's in comfort and pain free and it has been nice knowing her. And she died at home that next night. But I guess when they rolled her in the room in her home - of course, they had flowers and everything and she just smiled and her little dog was there. They put the dog up in the bed. So, it went the way it needed to go.

Summary of nurses' perceptions of physician-patient/family

communication. The MJH nurses perceived that physician-patient/family communication lacked in both units. The forces at work in these units created environments in which physicians and nurses did not focus on doing what was best and right for the patient/family. Nurses in both units shared that they worked around the missing communication by having other caregivers or they communicated the decided plan of care to the patient/family. Incorporating patient/family preferences into care decisions was not something that nurses actively thought about. It appeared that physician beliefs and behaviors paralleled nurses' beliefs and behaviors.

The MH MS nurses also perceived that not all physicians communicated with the patient/family and heeded their preferences. In contrast to the MJH, the majority of MH MS unit nurses perceived that most physicians did communicate with the patient/family

and incorporated their preferences into care decisions. Patient centeredness or doing what was best and right for the patient/family was a core value in the MH and it was evident in nurses' examples. The MH ICU was unique in their perception that physicians consistently communicated and heeded patient/family preferences. The forces at work in this unit (nurses confronted physicians, nurses created change, and patient/family centeredness) facilitated the nurses' ability to provide patient/family-centered care.

Chapter Summary

Organizational culture is a multidimensional, multilevel concept. The focus of this study was the influence that the unit-level culture had on nurses' beliefs and behavior towards EBP. The organizational cultural framework used in this study posits three levels of culture: artifacts, values and beliefs, and basic assumptions (Schein, 2004). Basic assumptions reflect the core culture and guide behavior and tell people how to perceive, think, and feel about things. Given their significance, this chapter focused on the basic assumptions that related to three cultural dimensions defined by Schein (2004): (a) the nature of reality and truth, (b) the nature of human activity, and (c) the nature of human relationships. The first two cultural dimensions reflected how the work group dealt with problems of external adaptation and the last assumption reflected how the group dealt with issues of internal integration. A summary of findings regarding these three cultural dimensions will now be presented.

The nature of reality and truth. Basic assumptions that related to the nature of reality and truth defined what was important for the unit to focus on, improve, or change. The majority of nurses in this study perceived that information about the change and the reason for the change influenced their ability to change their behavior. The MJH MS unit nurses were mostly unaware of changes and the reason for the change. However, the MJH ICU nurses sometimes knew of the change but they did not always understand the reason for the change. Some of the MJH ICU nurses perceived that information about

the change was “key” in facilitating their ability to change their behavior. However, they also acknowledged that they did not always receive enough information. Some MJH ICU nurse perceived that communication was improving on the unit and it was a “work in progress.” In contrast, MH nurses perceived that most nurses were aware of the “what” and “why” of the change and this facilitated their ability to incorporate evidence-based interventions into their practice. Also, most MH nurses perceived that knowing about the change and its reason facilitated their ability to change. Having knowledge of the change and its benefit for the patient/family or themselves allowed nurses to form cognitive beliefs towards the change, which in turn, influenced their behavior.

How changes were communicated at each hospital did not differ significantly. However, the consistency of the communication differed across the units. Communication in the MJH MS unit primarily occurred via informal word-of-mouth or through formal staff meetings. The MJH ICU’s primary method of communication was through posted material. This placed the responsibility of obtaining information on the nurse. MJH ICU nurses frequently shared that they did not have enough time to read everything that was posted and often signed that they read material when they did not. The MH MS unit relied primarily on the change-of-shift “huddle” to convey information about changes and the reason for the change. The MH ICU relied on multiple methods of communication. Interestingly, many MJH nurses shared that they often found out something had been changed after they made a mistake. MH nurses did not share this experience; no MH nurse shared that they did not know about a change or a reason for the change. Having a consistent flow of information allowed the nurse to identify what was important, why it was important, and what was expected.

The last reality and truth attribute dealt with the role that data played in identifying what was important to focus on, improve, and/or change. All units collected nursing-sensitive indicator data, but the role that these data played in identifying what was

important differed across the units. Recall that most nursing-sensitive indicators have associated evidence-based interventions that are used to prevent untoward patient/family outcomes. Understanding the role that these data played in each unit provided a window into the importance they placed on evidence-based interventions. The MJH was not as focused on these evidence-based outcomes as the MH was. Evidence-based practice was fairly invisible in the MJH environment and their lack of focus on nursing-sensitive indicators made it more invisible and harder for the nurse to use because it was not deemed important. In contrast, the MH was data-centric. Nurses from both units collected nursing-sensitive indicator data, decided how they would improve based on this data, and implemented the changes. Two structural supports facilitated the nurses' ability to do this at the MH: the shared governance structure and their unit-based "Team Map" which incorporated all improvement efforts. The MH nurses consistently strove to improve patient/family outcomes a core assumption and central to their functioning.

The nature of human activity. Basic assumptions that related to the nature of human activity defined the right thing to do. Two attributes emerged from the data and they included following standards and/or expectations and nurses' ability to create change. Stark differences existed between the hospitals when it came to following standards and/or expectations. The MJH nurses inconsistently followed standards and/or expectations and the MH nurses consistently followed standards and/or expectations. The MJH nurses provided many examples where they did not follow what was expected (Hourly Rounds and the labeling improvement plan) but said that they did. Nurses also shared that this occurred at the hospital level because administration would tell surveyors that they always followed the standard when nurses knew that they did not. Adherence to standards and/or expectations was perceived to be optional at the MJH until a sentinel event occurred and then administration began to enforce

compliance. Quite the opposite environment existed in the MH. MH nurses perceived that following standards or doing what was best and right for the patient/family was the only option that existed. That was how they operated. The differences in the assumption to follow standards had a huge influence on nurses' ability to incorporate evidence into their practice.

The ability to change plays a central role in EBP. To engage in EBP, the way it is defined in this study requires the nurse to change their practice to incorporate new evidence and patient/family preferences that emerge throughout the illness episode. Considering the significant role that change has to EBP, understanding the nurses' ability to create change on their unit becomes important.

The MJH MS unit nurses were unempowered to create change on their unit for a variety of reasons. The most evident reasons related to their nurse leaders. The majority of MJH MS unit nurses perceived that their nurse leaders were unreceptive, did not seek out their input/opinion, and often failed to act on nurses' input/opinion. This created an environment in which nurses stopped speaking up or left the institution because they could not create the change they deemed necessary to improve patient/family outcomes and/or their environment. However, some nurses did continue to speak up and they perceived that they were then labeled as "complainers."

In contrast, the MJH ICU nurses could create some change on their unit. An important reason for their ability to create some change was that their nurse leaders were perceived to be receptive to their input/opinion. However, the inconsistency in the nurses' ability to create change related to the inconsistent action taken by the nurse leaders in response to their input/opinion. Unlike the MJH MS unit nurses, the MJH ICU nurses did not perceive that they were labeled "complainers" when they spoke up; however, there was an undercurrent that some nurses feared repercussions if they did speak up. This fear did keep some nurses quiet. Shared governance councils existed in

the MJH ICU unit but not the MJH MS unit. However, the MJH ICU nurses perceived that shared governance councils facilitated the flow of information and were not seen as a mechanism in which they could create change.

In contrast, the MH nurses created change primarily through their shared governance structure. Also, MH nurses believed that change was beneficial because it improved patient/family outcomes and/or improved their environment. Yet, there was an undercurrent in the MH MS unit where the Nurse Manager inconsistently took action on nurses' input; especially when their concerns were about nurse tech or nurse performance issues. MH ICU nurses perceived that their nurse leaders were consistently receptive and responsive to their input and change happened rather easily in this unit.

The nature of human relationships. Basic assumptions that related to the nature of human relationships define the way people relate to each in order to create their internal environment. Nurses' ability to work together and with other caregivers, specifically physicians, influenced their ability to follow evidence, create change, and incorporate patient/family preferences. Consequently, these assumptions, in turn, influenced nurses' beliefs and behavior.

The MJH nurses, for the most part, worked together but there were some nurses that consistently did not help other nurses with patient care. Also, the MJH nurses perceived that cliques were present on both units. The MJH MS unit nurses perceived that cliques overtly influenced their ability to work together and MJH ICU nurses perceived that in spite of the cliques, nurses helped each other, but assistance was not forthcoming. The majority of nurses in both units accepted the non-helping behaviors in their peers even though they believed that not working together was unbeneficial for the patient/family and them. The acceptance of non-helping behavior was facilitated by fact that nurses inconsistently followed standards and/or expectations and they could not always create the change necessary to improve patient/family outcomes or their

environment. In light of this environment, it also was much easier for MJH nurses to not focus on doing what was best and right for the patient/family but to focus on and do what was best for them. Interestingly, one MJH MS unit nurse perceived that working together was a means to facilitate nurses' ability to change and adhere to standards because they would encourage and hold each other accountable.

In contrast to the MJH, the majority of MH nurses perceived that they consistently worked together. Two MH MS unit nurses perceived that cliques were present on the unit. One nurse perceived that cliques were there in the past and were no longer an issue and the other nurse perceived that age divided the staff but this did not interfere with their ability to work together. MH ICU nurses perceived that cliques did not exist in their unit. MH MS unit nurses perceived that the shift-change "huddle" facilitated their working together because patient/family needs were presented and there was the expectation that everyone worked together to meet these needs. The MH ICU was the only unit where the nurses' perception of teamwork was validated by outsiders' perceptions. In fact, working together was perceived to be a core assumption at the MH: working together for the benefit of the patient/family was the way they operated.

The nurses' ability to confront each other and physicians when they did not adhere to evidence-based standards and/or expectations influenced their ability to incorporate evidence in their practice. Recall that all nurses viewed physicians as an influential referent group when it came using evidence in practice. The nurses' ability to confront other nurses and physicians when they did not adhere to evidence-based standards provided insight into the importance of using evidence and doing what was best and right for the patient/family.

The MJH MS unit nurses frequently did not confront each other or physicians when they did not follow standards and/or expectations. Sometimes nurses would take their concerns to nurse leaders. However, nurse leaders did not always take action. MJH

MS unit nurses often perceived that the physician was their “superior” and consequently, power and possibly gender issues inherent in the nurse-physician relationship surfaced as a barrier to their ability to confront the physician.

Unlike the MJH MS unit nurses, the MJH ICU nurses inconsistently confronted each other and physicians. Sometimes MJH ICU nurses took their concerns regarding physicians not adhering to standards to nurse leaders but they did not always see a change in physician behavior. Power and gender issues were also present in the MJH ICU but they were not as powerful as the perception expressed in the MJH MS unit. Not surprisingly, nurses from both MJH units shared stories in which a nurse overstepped boundaries to provide what they perceived to be good care to another nurses’ patient rather than confronting the nurse; it was much easier to improve patient/family outcomes in this manner. Recall the other forces at work in both units: nurses inconsistently adhered to standards, nurses inconsistently created change, and nurses did not always focus on doing what was best or right for the patient/family.

In contrast, the MH MS unit nurses consistently confronted each other but inconsistently confronted physicians when they did not adhere to evidence-based standards and/or expectations. Recall that nurses in this unit followed standards, inconsistently created change, and focused on doing what was best and right for the patient/family. However, power and gender issues inherent in the nurse-physician relationship surfaced in this unit as well as some physicians being unreceptive to nurses’ input/opinion. When MH MS unit nurses encountered these situations, they frequently brought their concerns to nurse leaders and they perceived that the issue was dealt with. In contrast, the MH ICU nurses consistently confronted each other and physicians when they did not adhere to evidence-based standards. When MH ICU nurses encountered unreceptive physicians, they readily brought their concern to nurse leaders and the issue was dealt with.

The consistency of nurse-physician communication regarding the patient/family was a vital means for the nurse to convey patient/family needs and preferences to physicians. Nurses from all units identified three factors that influenced the consistency of nurse-physician communication: (a) physician's receptiveness to nurses' input, (b) physicians seeking out nurses for their input, and (c) physician's respectfulness towards nurses. The majority of nurses from both MJH units and the MH MS unit perceived that most physicians consistently were receptive, sought them out, and were respectful. However, when physicians did not exhibit these traits, MJH MS unit nurses shared that they avoided and/or withheld vital patient/family information. This put up a barrier to incorporating patient/family input into decisions as well as diminishing their focus on doing what was best and right for the patient/family. The MJH ICU nurses perceived that nurse-physician communication was nuanced. Nurses knew that if they asked one physician about a patient/family need and they refused to act, they dared not ask another physician the same question even though they perceived that doing so was beneficial for the patient/family. This diminished the focus on doing what was best and right for the patient/family. Also, certain physicians were more receptive to certain nurses. This created an environment in which nurses worked around physician idiosyncrasies; nurses made patient care assignments based on how well the nurse and physician got along. Recall that nurses inconsistently confronted others and they inconsistently created change to improve care. Nurses working around physician idiosyncrasies helped them focus on doing what was best and right for the patient but it did not fix the underlying problem.

Even though the majority of nurses from the MH MS unit perceived that nurse-physician communication was inconsistent, unlike their MJH MS unit peers, when they encountered an unreceptive, disrespectful physician, they still attempted to communicate with them about the patient/family. If the physician still was unreceptive or disrespectful,

the MH MS unit nurse took their concern to nurse leaders and they perceived that the issue was dealt with. This was in direct contrast to what occurred in the MJH MS unit. Doing what was best and right for the patient/family was much more evident in the MH MS unit than in both MJH units.

The MH ICU nurses perceived that nurse-physician communication consistently occurred. The majority of nurses perceived that physicians respected them and desired to have their input regarding the patient/family. Interestingly, no MJH ICU nurse openly stated that physicians respected him or her; but physician respect was implied in what they said. Also unique to the MH ICU was the nurses' perception that the physician was their equal. Doing what was best and right for the patient/family was most evident in this unit.

Physician-physician communication was also important for it increased the ability to do what was best and right for the patient/family. The consistency of this communication differed across the units. Nurses from both MJH units perceived that physician-physician communication was inconsistent. MJH MS unit nurses frequently mentioned that they "played the physician's secretary" and were expected to communicate with other physicians regarding concerns that a physician had. This also happened in the MH ICU but to a lesser extent. There were not enough data on this topic from the MH MS unit to form an assumption. However, the MH ICU nurses perceived that physicians consistently communicated with other physicians regarding patient care. The ability to for physicians to directly communicate with each increased the ability of the team to do what was best and right for the patient/family.

The consistency of physician-patient/family communication influenced how involved the patient/families were in making clinical decisions as well as how focused caregivers were on doing what was best and right for the patient/family. The majority of the MJH nurses perceived that physician-patient/family communication was lacking.

Several reasons attributed to this perception: (a) physicians told the patient/family that they had to have a certain test or procedure, (b) patient/families were unaware of what the plan was, and (c) the same test/procedure was ordered for all patients regardless of need. The nurses from both MJH units attempted to compensate for the lack of physician-patient/family communication. The MJH MS unit nurses did this by reviewing the chart with the patient/family. This provided information to the patient/family about the preestablished plan of care but it did not allow for patient/family input. The MJH ICU nurses compensated for the lack of communication by having other caregivers, such as the respiratory therapist, talk with the patient/family. Analogous to the MJH MS unit, the patient/family was informed but they were not involved in establishing the plan.

The MH MS unit nurses also perceived that physician-patient/family communication was inconsistent. However, in direct opposition to the MJH MS unit, the MH MS unit nurses perceived that most physicians talked with the patient-family and incorporated their preferences in care decisions. The MH ICU uniquely perceived that physicians consistently communicated with patient/families and incorporated their preferences into care decisions. The most powerful example of a nurse who did what was best and right came from the MH ICU. This was possible because of the forces at work in this unit: nurses confronted physicians, nurses created change, and nurses and physicians focused on doing what was best and right for the patient/family.

Chapter Six

Summary, Model Refinement, Discussion, Limitations, and Future Research

The use of EBP does not consistently occur in the nation's hospitals and this leads to substandard patient/family outcomes. EBP is a decision-making process that integrates the use of best evidence or research, patient/family preferences, and clinical expertise. This definition parallels the IOM's calls for transformation of the healthcare system to one that is evidence-based and patient/family centered. It is not understood why caregivers, specifically nurses, do not engage in EBP. In order to shed some light on the reasons for this, this study combined two theoretical frameworks to create a multilevel framework (see Figure 1 below). This multilevel framework provided the ability to identify pertinent individual-level cognitive beliefs and unit-level basic assumptions, which influenced nurses' adoption and maintenance of EBP. Additionally, two new variables, nurse leader characteristics and hospital-level basic assumptions were found to influence nurses' use of EBP. The findings of this study highlight the dynamic interplay between individual beliefs, nurse leader characteristics, unit-, and hospital-level basic assumptions and all have a powerful influence on nurses' behavior. This chapter summarizes the key findings and consistent with analytic ethnography, uses these findings to refine and extend the theoretical model explaining nurses use of EBP. Limitations of this study and future research directions are also discussed.

Summary of Key Cognitive Beliefs and Basic Assumptions

Key cognitive beliefs and basic assumptions that relate to nurses' use of EBP will be presented as they pertain to three important concepts: the use of evidence, patient/family centeredness, and change. Key cognitive beliefs and basic assumptions that relate to each of these concepts are summarized in Table 3.

Table 3. Key Cognitive Beliefs and Basic Assumptions

	Use of Evidence	Pt/family Centeredness	Change
Behavioral Beliefs	<ul style="list-style-type: none"> • Beneficial 	<ul style="list-style-type: none"> • Partnership • Improves outcomes 	<ul style="list-style-type: none"> • Burden vs. Benefit
Control Beliefs	<ul style="list-style-type: none"> • Experience • Embedded evidence • Adequate resources and supplies • Computer resources 		<ul style="list-style-type: none"> • Adequate resources and supplies
Normative Beliefs	<ul style="list-style-type: none"> • Social pressure 		<ul style="list-style-type: none"> • Peer pressure
Basic Assumptions	<ul style="list-style-type: none"> • RN assertiveness • Standards & expectations 	<ul style="list-style-type: none"> • RN assertiveness & empowerment • MD-MD communication • MD-Pt/family communication • Teamwork 	<ul style="list-style-type: none"> • Communication and transparency • Metrics-centric • RN empowerment

Key cognitive beliefs regarding the use of evidence. Nurses in this study believed that EBP was beneficial for the patient/family and should be done. The majority of nurses in this study defined EBP to be the use of some type of evidence in practice, which was inconsistent with the way EBP was defined in the study. Nurses' perceptions about how they used EBP in their practice varied greatly by hospital. MJH nurses perceived that EBP was something that was done outside of their unit compared to MH nurses who perceived that everything that they did was evidence-based and this was the only way caregivers could practice at the MH.

In addition, nurses held four control beliefs, which influenced their ability to engage in EBP. The first control belief was that experience, their own and that of other nurses, was the primary source of evidence when making care decisions. This belief could facilitate or hinder nurses' use of evidence and depends upon the knowledge base of the nurse or other caregiver. The second influential control belief related to the

availability of evidence-based written care documents, such as standards of care, protocols, orders, policies, and procedures. Both hospitals embedded these evidence-based documents into their structures and process of care. However, MH nurses, in contrast to MJH nurses, readily relied on these written documents to guide their care. The third control belief relates to the availability of adequate resources, such as staffing and time, and adequate supplies and equipment. The majority of MJH nurses believed that they did not have enough resources and supplies to follow evidence-based guidelines. In contrast, MH nurses did not speak of resources and supplies in relation to their use evidence in practice. The fourth control belief related to the belief that the computer was a major source of information. Nurses from both hospitals frequently used the computer to access the Intranet and Internet to obtain information on diseases, medications, and diagnostic tests. Nurses were certain that Intranet information was evidence-based; however, they were less certain of the quality of the information obtained from the Internet. Even with the availability of computers, nurses still did not look up nursing research to answer clinical questions.

Key normative beliefs that influenced nurses' use of EBP related to the perceived social pressure exerted by other nurses and physicians. In line with their control belief, the majority of nurses did not look to research to solve clinical problems; instead they relied on experience. Nurses from all units frequently stated that it was not "in their culture" for nurses to look to research; however, they perceived that nurses above the staff-nurse level and physicians did use research to develop embedded documents. MH nurses also believed, unlike MJH nurses, that their nurse leaders (Nurse Manager, Educator, Patient Care Leader) facilitated their use of evidence by helping them change practice based on evidence and facilitating the Journal Club.

Nurses in this study saw physicians as a powerful facilitator or blocker to their use of evidence. EBP was not talked about much in the MJH, especially in the MS unit,

and this rendered it somewhat invisible. MJH MS unit nurses were uncertain if physicians used evidence in their practice. MJH ICU nurses were aware that physicians used evidence in their practice. However, not all MJH physicians followed the evidence and sometimes they refused to incorporate nurses' evidence-based care suggestions. The MH was totally different: MH physicians were perceived to consistently follow evidence and physicians in key leadership positions were perceived to be the drivers of many evidence-based practice changes.

Key cognitive beliefs regarding patient/family centeredness. Nurses in this study did not perceive that including patient/family preferences in care decisions was part of EBP. Nonetheless, the key cognitive beliefs regarding patient/family centeredness were behavioral and included the belief that partnering with the patient/family to make decisions was beneficial and that this improved outcomes. Universally, all nurses shared the belief that providing information about the plan of care to the patient/family was beneficial. The noticeable differences appeared when nurses talked about providing options to patient/families and eliciting their preferences and incorporating them into the plan of care. The majority of MJH nurses did not consciously think about involving the patient/family in shared decision-making. In contrast, the majority of MH MS unit nurses perceived that the patient/family was their "center" and MH ICU nurses perceived that the patient/family was their "boss." This connotes an expanded perspective of the role of the patient/family in the decision-making process.

Another striking difference between the hospitals relates to how nurses treated the "difficult" patient/family. MJH nurses held two cognitive beliefs towards the "difficult" patient/family: (a) families were good to have around when they complied with the routine and what was expected of them (behavioral) and (b) families became an obstacle when they did not comply with the routine, asked too many questions, or advocated for the patient too much (control). When the MJH nurse perceived that the

patient/family became an obstacle to their ability to provide care, they tended to avoid the patient/family. In these situations, nurses admitted that care suffered, evidence was not followed, and they believed this was not beneficial but the control belief (obstacle) trumped the behavioral belief and they continued to avoid the patient/family. In contrast, MH nurses did not treat the “difficult” family any differently because they believed that the relationship with the patient/family was beneficial and this relationship resulted in favorable outcomes for the patient/family.

Key cognitive beliefs regarding change. The ability to change plays a pivotal role in EBP. By definition, EBP requires caregivers to change their practice to include the best evidence and incorporate patient/family preferences into care decisions as the illness episode unfolds. Interestingly, the MJH nurses held multiple cognitive beliefs toward change and nurses perceived that change did not happen easily. In contrast, the MH nurses held only behavioral beliefs towards change and nurses perceived that change occurred rather easily and in the ICU, it was embraced.

MJH nurses were most interesting in how they decided to adopt a change in practice. This group struggled with the benefit versus burden of the change when deciding to enact the change. MJH nurses weighed the benefit for the patient/family against the burden or cost to the nurse to enact the behavior. Frequently, MJH nurses believed that it took more effort on their part to enact the change. When this occurred, the nurses did not change their behavior or they signed that they completed the task when in fact they had not. Also, some MJH nurses believed that they did not have enough time or supplies (control beliefs) to enact the change. When MJH nurses believed that the change was not beneficial for the patient/family, it was a burden to them, it took more of their time, and they did not have the right supplies, they were less likely to change their behavior. Additionally, some MJH nurses perceived that peers, who

believed that the change was not beneficial, exerted social pressure on the other nurses to not adopt the change.

In contrast, the majority of MH nurses held the singular behavioral belief that change was beneficial because it improved patient/family outcomes and/or their work environment. Also, their nurse leaders were receptive and responsive to their concerns and this empowered nurses to create change. Change, when it occurred, was believed to be beneficial for the patient/family and themselves. MH nurses from both units perceived that the belief that change was good was converted into a key basic assumption in which nurses were empowered to create change to improve patient/family outcomes and/or their environment. Being empowered to create change facilitated nurses' ability to change.

Key basic assumptions regarding the use of evidence. Important basic assumptions that influenced nurses' use of evidence relate to the expectations that caregivers follow standards and nurses' assertiveness or ability to confront other caregivers. The hospitals differed greatly in their expectation that caregivers follow evidence-based standards/expectations. The MJH operated with the assumption that standards/expectations were inconsistently followed until a sentinel event occurred. The creation of this assumption was a result of nurses behavior in that they inconsistently followed standards because they often did not see the benefit of the change (behavioral belief), it was a burden for them to enact the change (behavioral), and often they did not have requisite skill, knowledge, or supplies to enact the change (control beliefs). Consequently, MJH nurses inconsistently changed their behavior in order to follow evidence-based standards/expectations.

In contrast, consistently following evidence-based standards and expectations was a core assumption at the MH and this was expected of all caregivers. This assumption surpassed the unit-level and was present at the hospital-level and influenced

all caregivers' beliefs and behavior. This assumption reinforced nurses' cognitive beliefs that using evidence was beneficial, evidence was readily available (embedded), and doing what was best and right for the patient/family (patient/family centeredness) was important. In turn, these beliefs influenced the assumption that all caregivers follow standards and/or expectations. Consequently, MH nurses tended to change their behavior and follow evidence-based standards.

The other important assumption regarding the use of evidence relates to nurses assertiveness or ability to confront their peers and physicians when they did not follow evidence-based standards/expectations. The majority of MJH MS unit nurses did not confront other nurses or physicians. Sometimes they brought their concerns to nurse leaders. However, nurse leaders inconsistently listened and responded to nurses' input/opinions and this created an environment in which nurses perceived that they were unempowered to create the necessary change to fix things. In regards to physicians, issues of power and gender that are inherent in the nurse-physician relationship were very evident in the MJH MS unit. Frequently, MJH MS unit nurses believed that the cost to them (burden versus benefit dilemma) to confront the physician when they did not follow evidence-based standards outweighed the benefit for the patient/family.

The MJH ICU nurses inconsistently confronted other nurses and physicians when they did not follow standards/expectations. Unlike the MJH MS unit, MJH ICU nurse leaders were receptive but inconsistently responsive to nurses' concerns; however, there was enough responsiveness that nurses believed that they were empowered to create some change. In regards to physicians, power and gender issues were also present in this unit but they were not as strong. Also, MJH ICU nurses did not speak of the benefit versus burden dilemma when deciding to confront other caregivers like their MJH MS unit counterparts. This may relate to their ability to create some change and responsiveness of nurse leaders. However, there still was an undercurrent

in this unit that caregivers decided how to act based on the perceived benefit to them to engage in the behavior rather than benefit to the patient/family.

The environment that exists in both MH units was one in which nurses consistently confronted each other when they did not follow standards/expectations. Other beliefs and assumptions, such as the expectation to follow standards, nurses were empowered to create change, patient/family centeredness, and desire to improve patient/family outcomes worked together to facilitate assertiveness by the nurses. In regards to physicians, MH MS unit nurses inconsistently confronted them and MH ICU nurses consistently confronted them. One difference between the MJH and the MH was that MH nurse leaders were consistently receptive and mostly responsive to nurses' concerns so that when they shared that physicians were not following standards, the issue was dealt with. This did not consistently occur in the MJH. Also, issues of power and gender were present in the MH MS unit but to a lesser extent than the MJH ICU and these issues were not evident in the MH ICU.

Key basic assumptions regarding patient/family centeredness. The ability of nurses and physicians to work together and do what is best and right for the patient/family (patient/family centeredness) was influenced by many beliefs and basic assumptions that relate to nurses' assertiveness, empowerment, and teamwork. Nurses from both MJH units inconsistently worked together for the benefit of the patient/family and often focused on their own needs. Cliques were evident in both MJH units and in the MJH MS unit, they openly interfered with nurses' ability to effectively work together and in the ICU their influence was covert. Nurses from both MJH units believed that the cliques were not beneficial; however, they accepted this behavior because they inconsistently confronted each other and they could not create change to fix it. The lack of nurse assertiveness and empowerment created an environment in which nurses did what was beneficial for themselves rather than focusing on the patient/family. In

contrast, MH nurses consistently worked together and focused on the patient/family. Working together (teamwork) with a focus on doing what was best and right for the patient/family were core basic assumptions that transcended to the hospital-level and was expected of all caregivers. There was some evidence of cliques on the MH MS unit but they did not impede the ability of nurses to work together. The MH ICU had no evidence of cliques and nurses perceived that they consistently worked together and outsiders validated this.

The unit-level care team includes other caregivers, such as physicians. The ability of physicians to communicate with nurses, other physicians, and the patient/family influenced the ability of the entire team to be patient/family centered. MJH nurses perceived that most physicians were receptive, sought them out, and were respectful. However, some physicians did not exhibit these qualities, and when this occurred, communication about the patient/family was diminished and at times nonexistent and this influenced the nurses' ability to use evidence. Compounding these situations in the MJH MS unit were the assumptions that nurses did not confront physicians, they were not empowered to create the change, and it was not necessary to follow standards/expectations. Similar forces were at work in the MJH ICU except that nurses did not withhold information; instead, communication between nurses and physicians was nuanced. Also, MJH ICU nurses tended to confront physicians more frequently and they were able to create some change. However, the nuanced nature of nurse-physician communication influenced the nurses' ability to be patient/family centered and include evidence in their practice. MJH ICU nurses provided compelling examples of when physicians were unreceptive to their concerns regarding hypotensive/hypertensive patients and these patients suffered untoward outcomes. The MJH ICU nurses believed that this was not beneficial for the patient/family; however, the cost to them to advocate for the patient/family outweighed the benefit (burden versus benefit dilemma). In both

MJH units, there were parallels between physician and nurse behavior in that both frequently did what was best for them and not what was best and right for the patient/family.

MH MS unit nurses perceived that most physicians, except for a few, were receptive, respectful, and sought them out. Unlike their MJH MS unit peers, MH MS unit nurses did not withhold pertinent patient/family information from the few unreceptive physicians; instead, they were more likely to confront these physicians. MH MS unit nurses also perceived that when they took their concerns to nurse leaders, physician behavior changed. MJH did not always have this experience. Patient/family centeredness was most evident in the MH ICU. Physicians and nurses readily worked together and focused on doing what was best and right for the patient/family. Beliefs and assumptions at play here included nurses' assertiveness, ability to create change, follow standards/expectations, and desire to improve patient/family outcomes. Unique features of this unit included the perceptions that physicians respected the nurses and that nurses and physicians were on the same level – that is, they were coworkers focused on doing what was best and right for the patient/family.

Another factor that influenced the ability of the care team to focus on the patient/family was the consistency of physician-physician communication. The MJH nurses perceived that communication between physicians was lacking and often times, especially in the MS unit, nurses were expected to be the intermediary between physicians. Nurses from both units did not believe that this was beneficial for the patient/family or for them (behavioral beliefs) because it took up their time (control belief). However, they have long enabled this behavior because: (a) they did not (MJH MS unit) or inconsistently (MJH ICU) confronted physicians, (b) of power and gender issues, and (c) they were unable to create change. The benefit to the individual trumped the benefit for the patient/family when nurses accepted this behavior. There were not

enough data from the MH MS unit concerning physician-physician communication so no assumption could be explicated. However, the opposite was evident in the MH ICU. Nurses perceived that physicians talked to each other and were focused on doing what was best and right for the patient/family. In this environment, caregivers followed standards, confronted each other, and created change to improve outcomes.

The last factor that influenced patient/family centeredness was the frequency of physician-patient/family communication. The majority of nurses from both MJH units perceived that communication between the physician and the patient/family was lacking. Nurses believed that this was not beneficial for the patient/family but they accepted the behavior because they did not (MJH MS unit) or inconsistently (MJH ICU) confronted physicians and they could not create change to improve this. Again, the burden versus benefit dilemma surfaced and oftentimes, the decision was made to do what was beneficial for the individual rather than the patient/family.

The MH MS unit nurses perceived that the majority of physicians provided evidence-based options to the patient/family and involved them in shared decision-making. The MH ICU nurses perceived that physicians consistently communicated options to the patient/family and engaged them in shared decision-making. Forces at work in both of these units were totally different than the MJH: the patient/family was their “center” or “boss,” they confronted each other, they followed standards, they did what was best and right for the patient/family, and they were empowered to create change.

Key basic assumptions regarding change. The ability to change practice and to incorporate patient/family preferences as the illness episode evolves is central to the nurses’ ability to engage in EBP. Several assumptions influenced nurses’ beliefs and behavior regarding change and they include: communication and transparency about the change, the role that data played in deciding what to change, and nurses’ empowerment

to create change. Nurses from all units perceived that communication about the change and the reason for the change were vital to their ability to change their behavior. MJH nurses were sometimes unaware of changes or the reason for the change; this was more pronounced in the MJH MS unit than the MJH ICU. MJH nurses perceived that communication about changes was key to their ability to change; however, they perceived that communication was lacking in both units. In contrast, MH nurses perceived that they consistently were aware of the change and the reason for the change and this facilitated their ability to adopt the change. Perhaps, having knowledge of the change before it occurred allowed the nurse to form positive cognitive beliefs towards the change and this in turn facilitated their adoption of the change.

The role that unit-level data played in determining what was important to focus on and improve varied by hospital. All units collected data on unit-level nursing sensitive indicators. Unit-level patient outcome data were fairly invisible in defining what was important in the MJH except for patient/family satisfaction, which played a central role. This lack of focus on evidence-based metrics increased the invisibility of the use of evidence in practice. The MJH nurses perceived that they were frequently told to change their practice because it was the thing to do and not that the change was associated with a patient outcome. In contrast, MH nurses were data-centric. MH nurses were well aware of nursing sensitive outcomes and these metrics defined what was important to focus on and improve. MH nurses actively participated in the improvement process by collecting data, discussing and deciding how to improve their outcomes, implementing the change, and repeating the cycle. This process was part of their shared governance structure. MH nurses involvement in the improvement process influenced their ability to create change and to do what was best and right for the patient/family.

The ability of nurses to create change was associated with how empowered nurses were and this depended on nurse leader characteristics. MJH MS unit nurses

perceived that they were unable to create change because nurse leaders were unreceptive and unresponsive. This created an environment in which nurses stopped speaking up or they left the unit. MJH MS unit nurses accepted a lot of adverse patient/family outcomes and unacceptable behavior because they perceived that nothing changed when they voiced their concerns. MJH ICU nurses could create some change because their nurse leaders were receptive and mostly responsive. However, there was an undercurrent in this unit that nurses did not speak up because they feared reprisal. Also, nurses perceived that shared governance was a means to facilitate the flow of information and not a mechanism to create change; change mostly occurred through nurse leaders. MH MS unit nurses perceived that, for the most part, they were empowered to create change. However, MH MS unit nurses perceived that nurse leaders were unresponsive to their concerns about sub par staff performance and consequently, they stopped bringing forth these types of concerns. MH ICU nurses perceived that they were empowered to create change because their nurse leaders were consistently receptive and responsive to their concerns. Also, all MH nurses perceived that their shared governance structure afforded them the opportunity to create change by engaging nurse leaders at all levels of the organization in shared decision-making.

Model Refinement

The multilevel framework guiding this study consists of the combination of Ajzen's theory of planned behavior and Schein's organizational culture framework (see Figure 1 below). Consistent with the goals of analytic ethnography, findings from this study indicated several areas of theory refinement and extension, which are specific to nurses' adoption of EBP. Major theory modifications are outlined first for ease of identification and highlighted with blue font in Figure 6 below. A more detailed discussion follows. Major changes in the model include:

1. New **antecedents** to planned behavior and unit-level culture
 - Hospital-level basic assumptions regarding standards and expectations, patient/family centeredness, and teamwork were present. There were enough data to support placing this variable in the model; however, there were not enough data to determine if hospital-level basic assumptions are an antecedent to unit-level basic assumptions and individual beliefs and/or if they have a moderating effect to sustain assumptions, beliefs, and behavior.
 - Unit-level nurse leader characteristics are antecedents to the development of unit-level basic assumptions and individual cognitive beliefs. Nurse leader characteristics continue to moderate unit-level basic assumptions, individual cognitive beliefs, and the interaction between assumptions and beliefs to sustain the environment in which EBP can occur. Nurse leader characteristics added to the model based on study findings included:
 - Receptiveness
 - Responsiveness
 - Foster
 - Nurse empowerment
 - Teamwork
 - Patient/family centeredness
2. New **unit-level basic assumptions**: unit-level assumptions added to the model based on study findings included:
 - Standards and expectations
 - Nurse assertiveness and empowerment
 - Teamwork
 - Communication and transparency
 - Data-centric
3. New **individual cognitive beliefs**: individual beliefs added to the model based on study findings included:
 - Behavioral Beliefs
 - Benefit versus burden
 - Partnership with patient/family
 - Control Beliefs
 - Adequate resources and supplies
 - Experience
 - Embedded evidence
 - Normative Beliefs
 - Social pressure
4. New **relationships** among individual and unit-level concepts: A reciprocal relationship between unit-level basic assumptions and individual cognitive beliefs was added to the model based on study findings.

Figure 1. Integration of Schein's (2004) Organizational Culture Conceptual Framework with Ajzen's (1988, 2005) Theory of Planned Behavior.

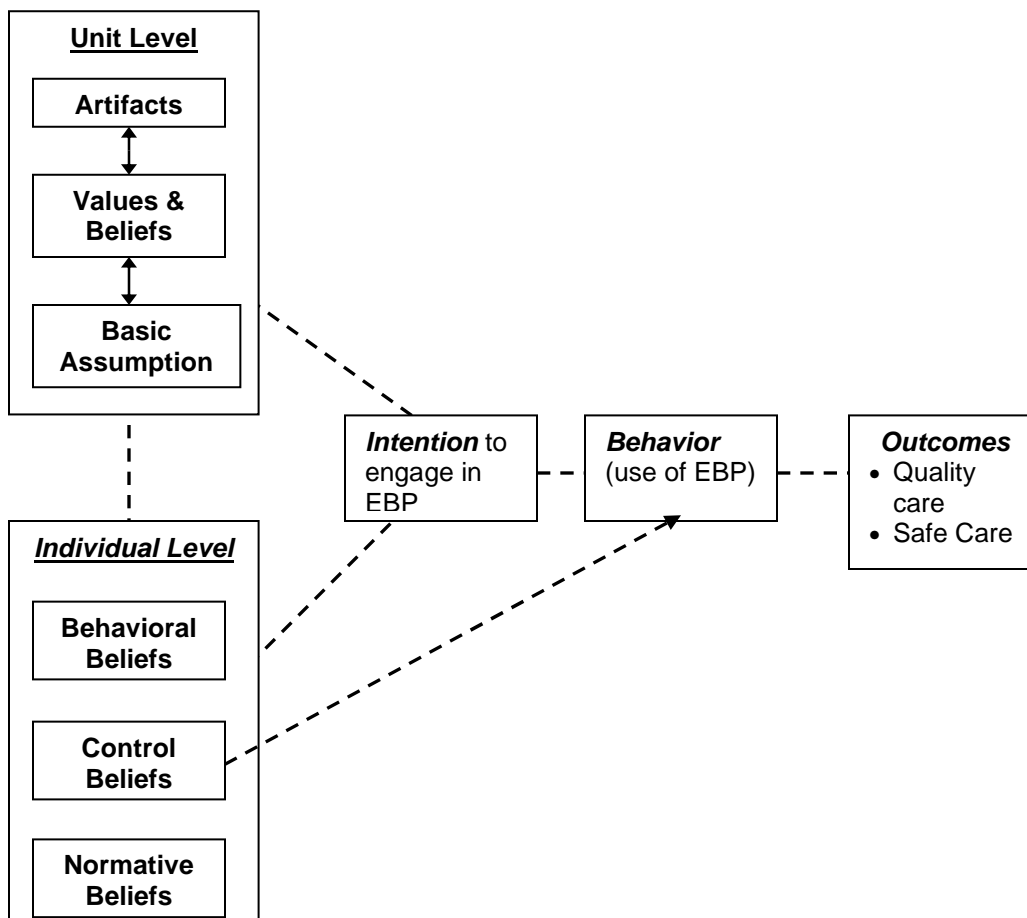
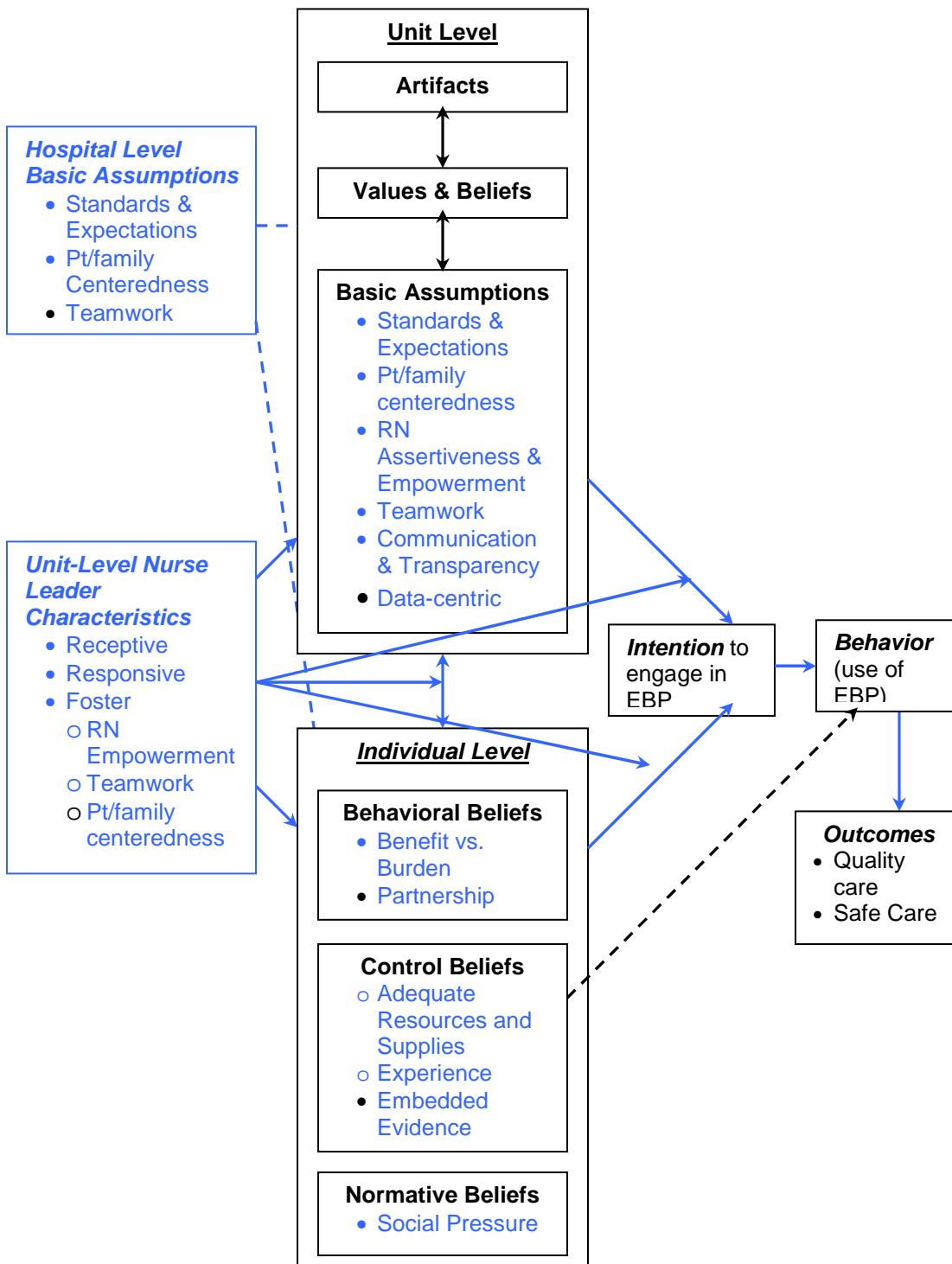


Figure 6. Revised EBP Implementation and Sustainability Model



Discussion

Nurses' perceptions of EBP. Discussion of nurses' perception of EBP and their use of evidence in practice will be presented prior to model refinements. The majority of nurses in this study defined EBP as the use of some type of evidence in practice. This definition is more in line with what is known as research utilization or the use of research in practice. *No nurse in this study defined EBP the way in which it was defined in this study: the integration of the best evidence, expertise, and patient/family preferences in making clinical decisions.* In the literature, the concepts of EBP and research utilization are often used interchangeably. A majority of studies about EBP or research utilization are of poor methodological quality, lacking theoretical frameworks, conceptual clarity, and consistent measures (Estabrooks et al., 2003a; Estabrooks, Wallin, & Milner, 2003b; Frasure, 2007; Squires et al., 2011) making it difficult to compare, contrast, and evaluate research findings. There are limited studies on how nurses define EBP. In a recent study, Banning (2005) also found that advance practice nurses in the UK perceived EBP to be the use of research in practice and the nurses were unable to identify the specific tenets of EBP. Additionally, the majority of nurses (91%) in the present study were aware of EBP, which is an improvement from studies in which just over half the nurses surveyed nationwide (54%) (Pravikoff et al., 2005) and 82% of New Jersey nurses (Cadmus et al., 2008) were familiar with EBP. However, both Pravikoff and colleagues (2005) and Cadmus et al. (2008), stated that they measured nurses' use of EBP, when in actuality, they asked nurses about their use of research in practice. The findings of the current study and other studies illuminate the need for researchers to consistently define what it is they are measuring.

Nurses' sources of evidence. *Experience – their own or others - was the primary source of evidence for nurses' clinical decision-making in this study.* This finding is consistent with qualitative and quantitative findings from other studies. For example,

Thompson and colleagues (2001b) discovered that medical, surgical, and coronary care nurses used their own and other's experience as their major source of information for making clinical decisions and this consistently overrode the use of evidence-based information. Nurses' reliance on informal and experiential knowledge over evidence-based knowledge was also confirmed quantitatively (Egerod, 2004; Estabrooks et al., 2005; McKnight, 2006; Pravikoff et al., 2005) and by an integrative review (Spenceley, O'Leary, Chizawsky, Ross, & Estabrooks, 2008). Additionally, Cadmus and colleagues (2008) surveyed nurses from 11 magnet- and 21 nonmagnet-designated New Jersey hospitals and discovered that there were no significant differences between the two groups in seeking information: experiential knowledge was the primary source of information for both groups of nurses. While the majority of nurses in the current study primarily relied on experience as a source of evidence, MH nurses shared that when they encountered something they did not know or infrequently encountered, they also retrieved evidence-based care documents to inform their clinical decision-making. This behavior was not as evident in the MJH.

Nurses in the present study shared that they did not look to nursing research to answer clinical questions. This finding is consistent with other studies that discovered nurses accessed electronic databases, such as OVID, on a very limited basis (Estabrooks et al., 2005; Griffiths & Riddington, 2001; Pravikoff et al., 2005; Thompson et al., 2001ab). However, MH nurses were aware that to make changes in their practice they would need to present research to support their request and they were successful in implementing changes with the help of non-staff nurses. MH nurses perceived that nurses, other than staff nurses, searched the literature to obtain pertinent research. There were some MJH nurses who perceived that nurses higher than staff nurses retrieved research and included this into some improvement plans; however, MJH nurses did not perceive that research was needed to change practice.

The majority of nurses from both hospitals in the present study shared that they used the computer to access the Intranet and Internet to obtain information concerning medical conditions, medications, and diagnostic information. Nurses in this study used this information for educational purposes – for their own knowledge or to inform the patient/family. Morris-Docker, Tod, Harrison, Wolstenhome, and Black (2004) surveyed nurses on four UK hospital wards and they found that nurses primarily accessed the Internet for the same type of information and nurses used this information for educational purposes. In contrast, Cadmus and colleagues discovered that magnet hospital nurses were more comfortable using the computer, consulted a librarian for information, used the Internet for information, and used databases to obtain information. These findings are not consistent with the current study because nurses from both hospitals were comfortable using the computer and frequently searched the Internet for information. However, nurses from both hospitals in the current study did not consult librarians or use databases to obtain information; instead, MH nurses consulted unit-based Nurse Managers, Educators, or Patient Care Leaders to look for this type of information.

Model refinement and extension. The central result of this study is the creation of a multilevel model, which specifies key individual, cultural, and leader characteristics necessary for the implementation and maintenance of EBP in the acute care setting. The theoretical model framing this study was refined and extended based on the data. Extensions to the model included the identification of two antecedent variables, hospital-level basic assumptions and unit leader characteristics. Refinements to the model included specifications of the unit-level culture and individual cognitive beliefs. Relationships between all variables were also identified and it was discovered that all variables influenced the ability of the nurse to engage in EBP.

Multiple conceptual models have been developed to guide individual and organizational EBP implementation. Examples of these models include: (a) Stetler 's model of research utilization (Stetler 1994; Stetler, 2001), (b) the Promoting Action on Research Implementation in Health Services (PARiHS) framework (Kitson, Harvey, & McCormick, 1998), (c) Rosswurm and Larabee EBP model (Rosswurm & Larabee, 1999), and (d) the Iowa Model (Titler et al., 2001). Most of these models are based on systems and/or diffusion of innovation frameworks and incorporate abstract constructs. These conceptual models provide individuals and organizations with general strategies to implement EBP. However, a paucity of empirical evidence supports the proposed relationships in the majority of these models. Because of this, it is difficult to specify strategies to facilitate and sustain EBP adoption within acute care settings.

To date, most studies about EBP or research utilization have not used these or any other theoretical frameworks and they have numerous methodological limitations; consequently, there is inconsistent conceptualization and measurement of key variables and this has resulted in the lack of theory development needed to advance the implementation of and/or increase the use of EBP or research utilization (Estabrooks et al., 2003a; Estabrooks et al., 2003b; Frasure, 2007; Squires et al., 2011). This study identifies salient individual beliefs, unit-level basic assumptions, nurse leader characteristics, and hospital-level basic assumptions that influence nurses' implementation and maintenance of EBP. This study contributes to the knowledge base by offering an empirically based mid-range theory with better specification of concepts that can be measured and tested.

Hospital-level culture. The first new antecedent variable added to the model is the hospital-level culture, which consists of basic assumptions regarding standards/expectations, teamwork, and patient/family centeredness has on unit-level culture and individual beliefs. Based on the findings in this study, a relationship has been

drawn between hospital-level culture and unit-level culture and individual beliefs. In the MH, the hospital-level basic assumptions influenced nurses and other caregivers to follow and use evidence-based standards and to work together to provide care that was patient/family centered. In contrast, MJH nurses and other caregivers inconsistently followed evidence-based standards, inconsistently worked together, and frequently were not aware of the need to incorporate patient/family preferences into care decisions. Hospital-level culture is most likely an antecedent to and continues to moderate unit-level culture and individual beliefs to sustain EBP. Further research will need to explore and validate the nature of hospital-level culture with other concepts in the model.

Currently, limited research exists regarding the influence that the organizational culture has on nurses' ability to engage in EBP. Available studies on the influence of the organizational culture on the use of research in practice tend to have methodological limitations (Foxcroft & Cole, 2009; Meijers et al., 2006; Scott-Findlay et al., 2006). Even with these limitations, current studies examining a link between organizational level characteristics and use of research in nursing practice have mixed results. In a recent pilot study to test the Alberta Context Tool (ACT), which is framed by the PARIHS framework, researchers found that a more positive context, which was defined as leadership, culture, and evaluation and conceptualized at the organizational level, was associated with higher reports of research use in practice (Cummings, Hutchinson, Scott, Norton, & Estabrooks, 2010). This study was subject to several limitations, which included the use of a theoretical framework that contains many high-level descriptive concepts without explicitly defined relationships, small sample size, and the use of self-reported research utilization as the dependent variable. Despite these limitations, this study lends support to the idea that the context in which care occurs does matter. In contrast, Bosch et al. (2011) quantitatively discovered that there were no associations between organizational culture, team climate, or preventive quality management at the

ward level in various hospitals and nursing homes in the Netherlands to the prevalence of pressure ulcers. Although this study also had conceptual and methodological limitations such as the lack of a theoretical framework, cross-sectional data collection, and small sample size, their findings do not lend support the findings of the current study.

Looking outside of nursing, in a literature review on the influence of organizational culture on health care performance, Scott, Mannion, Marshall, and Davies (2003) reported that study results also were equivocal with some supporting a link between organizational culture and behavior while other studies did not support this link. Regardless of the direction of the association between organizational culture and behavior, studies did not readily articulate the link between organizational culture and behavior (Scott, T. et al., 2003).

In light of the equivocal findings regarding the influence of organizational culture on behavior, such as the use of evidence, looking to the research conducted on Magnet hospitals may shed some light on this construct. Research on Magnet hospitals has long recognized that the organizational context exerts a powerful influence on nurse behavior; however, we do not have a fully specified model explaining the linkages between organizational attributes, nurses' behavior, and associated outcomes (Aiken, 2001; Aiken et al., 2008; Aiken et al., 1994; Aiken et al., 1997). It is widely recognized that the Magnet Model lacks theoretical underpinnings. In response to these concerns, one group of researchers used five Magnet hospital-level practice domains (strong leadership, adequate staffing and resources, collegial nurse-physician relations, nursing model of care, and staff nurse participation in hospital affairs) to develop the Nursing Worklife Model, which specified relationships between these domains and inserted structural empowerment as the theoretical underpinnings of the model (Laschinger & Leiter, 2006; Leiter & Laschinger, 2006; Manojlovic & Laschinger, 2007). Much research

has been done using the Nursing Worklife Model as a means to explain nurse outcomes, such as nurse job satisfaction (Laschinger, 2007) and patient outcomes, such as nurse reported adverse events (Laschinger & Leiter, 2006). To date, the model has not been used to explain nurses' use of EBP or research utilization. The Nursing Worklife Model lends support to the importance of the concepts of empowerment, nurse-physician relationships, and leadership in the acute care environment; however, the utility of this model to explain what occurs at the local unit-level is limited because the magnet domains are recognized to occur at the hospital-level. Testing of the nursing Worklife Model occurs as an aggregated global measure, which ignores specific hospital and unit settings. Although the Nursing Worklife Model sheds light on what may be occurring at a global level and the importance that empowerment of nurses has on nurse outcomes, much is still not understood about what nurses do at the local unit-level within hospitals.

The refined EBP implementation and sustainability model resulting from the current study specifies new concepts at the organization, unit, and individual level and their relationship with each other and nurses' use of EBP. This model provides concepts, which can be measured and tested with the ultimate goal of identifying interventions that facilitate EBP implementation and maintenance. This level of theory will begin to advance the science of EBP implementation and maintenance.

Unit-level nurse leader characteristics. Staff nurses in this study recognized the important role that unit-level nurse leaders had in creating and maintaining an environment in which EBP flourished. Specific unit-level nurse leader characteristics included: (a) receptive and responsive to nurses' input/opinion and (b) fostering nurse empowerment, teamwork, and patient/family centeredness. These unit-level nurse leader characteristics were found to be important antecedents to the creation of the unit-level culture and individual beliefs and they continued to moderate unit-level culture and individual beliefs in order to sustain the use of EBP. These attributes were described by

their presence in the MH, especially in the ICU, and noted as important in their absence in the MJH units.

Researchers have long argued that nursing leadership is vital to EBP implementation and research utilization (Gifford et al., 2007, Parahoo & McCaughan, 2001, Stetler et al., 1998). However, research on nursing leadership provides mixed results regarding the influence that nursing leadership has on EBP or research utilization. Researchers in Scotland recently discovered that the nurse manager was not important to the nurses' use of research and in fact, they posited that the nurse manager assumed a passive role and their participation in research utilization was limited due to competing demands and that gains in nurses' use of research were largely due to contextual factors such as the stability of the nursing workforce (Wilkinson, Nutley, and Davies, 2011). The nurse manager in this study was broadly defined as someone who had administrative responsibility for a ward, might or might not be a nurse, and included nurse leaders in nursing administration. This suggests that the role of the nurse manager had a broader scope of responsibility and was higher up in the organizational chart than the unit-level nurse leader in the present study. In spite of this, Wilkinson et al.'s (2011) findings do not lend support to the current study in which the unit-level nurse leader was perceived to have a vital role in creating an environment in which EBP could flourish.

In contrast, studies that provide support for the importance of nursing leadership in nurses' use of research identified several activities and behaviors that influenced nurses' use of research. These activities and behaviors included: providing support (Gifford et al., 2006; Gifford et al., 2007; Sandströma, Borglin, Nilsson, & Willman, 2011); being accessible and visible (Gifford et al., 2006; Sandströma et al., 2011); communicating well (Gifford et al., 2006; Sandströma et al., 2011); role modeling (Gifford et al., 2006; Gifford et al., 2007); influencing change (Gifford et al., 2006; Gifford et al., 2007); and monitoring clinical outcomes (Gifford et al., 2006; Gifford et al., 2007);

Sandströma et al., 2011). Several limitations were present in these three studies and they include: lack of specification at which level within the organization nursing leadership occurred; lack of clearly defined concepts, such as leadership and support; and the lack of how nursing leadership relates to other variables within the environment. Despite these limitations, these three studies lend support to the important role that nurse leaders have in facilitating nurses' use of EBP or research utilization. However, a strength of the current study is the identification of specific unit-level nurse leader characteristics that goes beyond lending support and role modeling to the importance of fostering an environment in which nurses are engaged in shared decision-making and empowered to make practice changes, which facilitates their ability to engage in EBP.

New unit-level basic assumptions. The primary focus on the individual nurse's use of evidence by researchers over the past four decades does not allow for the recognition of the complexities that are present in the practice environment that contribute to EBP. Key findings from this study demonstrate that the nurses' ability to engage in the three dimensions of EBP is influenced by both their individual cognitive beliefs and the unit culture, which is created by nurse leaders and work group members. A reciprocal relationship exists between individual cognitive beliefs and unit-level basic assumptions. It could not be determined which comes first, but the results of this study indicate that they influence each other and in turn individual behavior.

Nurses in this study identified important basic assumptions in the unit culture, which facilitated their ability to implement and sustain EBP: standards and expectations, nurse empowerment and assertiveness, teamwork, communication and transparency, and using unit-level data to make decisions. These basic assumptions influenced nurses' cognitive beliefs and behavior, which in turn, helped form the unit-level basic assumptions. Specifically, nurses identified that being assertive, being empowered to create change, following standards, working as a team that is patient/family centered,

being aware of changes and the reasons for the change, and focusing on improving unit-level patient metrics facilitated their ability to engage in the three dimensions of EBP. These findings are consistent with results of studies conducted in the U.S. and other countries.

As identified in the literature review in Chapter Two, two recent studies conducted by Pepler et al. (2005) and Scott and Pollock (2008) identified unit-level characteristics associated with nurses' use of evidence that are consistent with findings of this study. The areas of consistency relate to unit-level characteristics of nurse empowerment and assertiveness, teamwork, communication, and unit-level metrics.

In the present study, the nurses' ability to create change (empowerment) was found to be essential to their ability to follow evidence-based standards and to incorporate patient/family preferences in care decisions. This finding is consistent with the unit cultural theme of creativity, which was found to facilitate nurses' research utilization (Pepler et al., 2005). Creativity was defined as a nurse bringing forth innovative ideas or suggestions, which were implemented within the unit with the support of peers and leaders (Pepler et al., 2005). This implies that nurses were empowered to create unit-based change based on ideas from the literature, conferences, or other settings. However, the current study extends this to not only include the use of research but also to nurses' ability to create change to maintain patient/family centeredness.

The nurses' ability to confront other caregivers (assertiveness), in the current study, was key in facilitating: (a) all caregivers to adhere to evidence-based standards and (b) the incorporation of patient/family preferences in care decisions. This finding is consistent with Scott and Pollock (2008) who discovered that nurses' perceived use of research was influenced by their ability to speak up and confront physicians, who were perceived by nurses to dominate nursing practice. The findings of the present study

extend beyond the use of research in practice to also incorporate patient/family preferences in care decisions.

In the present study, the ability of the nurse to effectively work (teamwork) with each other and physicians influenced their ability to use evidence in practice and to engage the patient/family in shared decision making. Both Pepler et al. (2005) and Scott and Pollock (2008) discovered that teamwork influenced nurses' perceived ability to use research in their practice. However, findings from the current study extend beyond nurses' use of evidence to also include patient/family centeredness and the importance of the team to engage them in shared decision-making.

Nurses in the current study perceived that knowing what and why about proposed evidence-based changes was vital to their ability to change their behavior to incorporate the change. This finding is consistent with Scott and Pollock (2008) who discovered that nurses who were not aware of the reason for a change in their practice were less receptive to changing their practice to incorporate the change and therefore less able to use research.

In the present study, unit-level patient metrics were found to be important in defining what was important for the nurse to focus on and improve. Unit-level metrics often have evidence-based prevention guidelines and the increased importance on these metrics drives home the importance of incorporating evidence and changing practice to improve patient outcomes. Consistent with this finding was Pepler et al.'s (2005) discovery that using patient outcome data provided staff with a means to identify improvement interventions, which were related to an increased perception of research use by nurses; however, staff nurses perceived that nurse leaders had greater responsibility for achieving patient outcome goals (Pepler et al., 2005). This lends support to the importance of unit-level metrics in determining what is important to improve; however, the current study moves beyond the identification of improvement

goals to the shared responsibility that MH nurses had in collecting nursing-sensitive indicator data, deciding how to improve the outcomes, and making the necessary changes.

The unit culture, which is created by nurse leaders and nurses, does influence nurses' beliefs and behavior. Findings from the present study along with Pepler et al. (2005) and Scott and Pollock (2008) support this tenet. However, a major strength of the current study was the use of analytic ethnography, which allowed for the extension and refinement of a theoretical framework. This allowed for theory-based identification of important variables, their relationships, and the specification of current variables in the framework in order to more clearly describe and explain what occurs when nurses engage in EBP in the acute care setting. Mid-range theories that explain and describe how and why nurses engage in EBP are missing in the literature.

Individual beliefs. Individual cognitive beliefs (behavioral, control, and normative) were found to influence nurses' decisions to engage in the three dimensions of EBP. Specifically, nurses in this study unanimously believed that using evidence in practice was beneficial and should be done, which is a positive behavioral belief. In spite of their belief that using evidence in practice was beneficial, MJH nurses inconsistently used evidence in practice because of the existence of other cognitive beliefs and basic assumptions. According to the theory of planned behavior, behavioral beliefs are the antecedents of attitude (Ajzen, 1991, 2005). The lion's share of research on research utilization, which is one aspect of EBP, focused on individual characteristics of the nurse. These studies have consistently identified barriers and facilitators to nurses' use of evidence in practice (Carlson & Plonczynski, 2008; Estabrooks, 2003; Hutchinson & Johnston, 2006). A frequently cited individual characteristic in the literature is the nurse's attitude toward research; several studies have consistently identified that a more positive attitude toward the use of research in practice was found to be a strong predictor of, and

to have a positive influence on, the self-reported use of research in practice by nurses (Champion & Leach, 1998; Estabrooks et al., 2003a; Parahoo & McCaughan, 2001; Rodgers, 1994). The MH nurses in the current study support this finding. However, MJH also believed that EBP was beneficial but they inconsistently used evidence in their practice because of other cognitive beliefs that they held along with the influence that unit-level basic assumptions had on their beliefs and behavior.

Findings from the present study illuminate the influence of not only behavioral beliefs but also the interplay between individual behavioral, control, and normative beliefs, which occur when nurses decide to engage or not engage in the three dimensions of EBP. The interplay of the three cognitive beliefs was most evident in the MJH. The MJH nurses inconsistently followed evidence-based standards/expectations and frequently were not patient/family centered. When making clinical decisions, MJH nurses frequently weighed the benefit of the intervention for the patient/family against the perceived burden to them to enact the intervention. Often, MJH nurses decided to do what was beneficial or easy for them rather than what was beneficial for the patient/family; even if this meant that evidence-based standards/expectations were not followed. Other factors, which also influenced MJH nurses' ability to follow evidence, included the perceived lack of resources and supplies (control belief) and the influence of the physician on their ability to incorporate evidence into their practice (normative belief). The dilemma between benefit and burden was not evident in the MH. MH nurses decided what to do based primarily on behavioral beliefs and specifically on the perceived benefit for the patient/family and their desire to improve patient/family outcomes by incorporating evidence into their care. MH nurses consistently followed evidence-based standards/expectations and were consistently patient/family centered; these beliefs were also reflected in unit-level and hospital-level basic assumptions. Despite wide recognition of the importance of individual behavioral change to the use of

research in practice, we have not understood how individual determinants of research utilization interact with each other because most studies that examined individual determinants employed descriptive methods, which primarily examined singular relationships and often lacked theoretical underpinnings to support the proposed relationships that were found (Estabrooks et al., 2003a). Also, there has been a lack of study on the cognitive determinants of nurses' engagement in the three dimensions of EBP. Much research has focused on the individual barriers and facilitators and this has not increased the use of evidence by nurses and it is still not known if removing the barriers and increasing the facilitators results in an increased use of evidence (Carlson & Plonczynski, 2008).

Limitations

The findings in this dissertation are subject to several limitations. First, the interview guide underwent a major revision during the study. This revision may have influenced the data that was collected since the questions changed. However, the interview guide remained true to the conceptual framework but the questions were revised to be more general rather than focused in nature. These changes did not seem to influence participant's responses; however, there is no way to verify this. In the future, the researcher would trust the process more and accept the fact the open, broad questions are easier for participants to answer and the information that they provide will be rich, thick, and relevant to the topic of interest.

Second, a very small number of participants used the interview as a means to primarily express complaints about their practice environment and it seemed as if the interview was somewhat of a catharsis for the participant. Their focus on only negative aspects of their environment did not allow for the collection of data on the positive aspects within their environment, which limited the perspective they provided. However, the data that they did provide was powerful and compelling. The researcher attempted to

refocus the interview to obtain positive as well as negative perceptions but some participants were still not able to report positive aspects in their environment. In the future, the researcher will be more aware of changes in the dynamics of the relationship with the participant from one that is for information gathering to one that becomes cathartic and she will probe to find positive perceptions as well.

Although not a limitation, in the future the researcher would write a priori hypotheses based on the review of the literature and the conceptual framework. The tenets of analytic ethnography allow for hypotheses to be written based on the literature review and propositions in the theoretical framework. This would facilitate data collection, data analysis, and the writing of the findings by providing more focus to the process. If hypotheses were written for the current study, it might be possible that certain concepts, such as unit-level leader characteristics or unit-level culture, might have clearer delineation because data collection would have been focused based on the literature. However, the broader approach, allowed for themes to readily emerge from the data, which fit the framework and allowed for the creation of a mid-range theory that explains and describes how nurses implement and maintain EBP.

Future Research

The key finding of this study is the creation of a refined multilevel theoretical model that explains and describes how nurses implement and maintain EBP at the point-of-care. This model specifies the interrelationships between salient variables found at different levels within the hospital organization. In addition to recognition of key variables, this model specifies components of the hospital- and unit-level culture, unit-level nurse leader characteristics, and individual cognitive beliefs, which are essential to the implementation and maintenance of EBP. Priorities for research include further exploration of key variables and the development of valid measures so that testing of the integrated model can occur.

The key variables that require further exploration include the influence of the hospital-level culture and unit-level nurse leader characteristics. The research that has been conducted on these variables is equivocal regarding the influence that each of these might have on nurses' use of research in practice. Additionally, the concept of hospital-level culture was not fully specified or determined in this study since the focus of the study was on unit-level culture. It needs to be determined if hospital-level culture is an antecedent to and continues to moderate unit-level culture and individual beliefs. Staff nurses in this study readily identified that the unit-level nurse leader plays an important role in creating the culture of the unit and in turn, facilitating their use of EBP. However, this model only represents staff nurses' perceptions of the unit-level nurse leader role. Further qualitative work is needed to uncover how other people such as physicians, administrative personnel, and nurse leaders themselves perceive their influence on the creation and maintenance of the unit culture and on nurses' beliefs towards EBP.

The next step is to develop valid measures for the salient concepts in the multilevel model. Currently, there are tools that measure organizational culture and leadership. However, it is premature to use these tools since these two concepts require further exploration to determine their attributes. Variables in the model for which there are no valid measures are the EBP process and the unit culture. Most of the research on EBP or research utilization designates EBP or research utilization as the dependent variable rather than as a process variable and it is often measured as a self-reported perception. The first challenge would be to develop a quantitative measure that captures the nuances of nurses engaging in the three dimensions of EBP. EBP is a multifaceted process that is influenced by the individual, other caregivers, nurse leaders, and the culture in which it occurs. To date, there is a dearth of process measures that accurately measure what it is that a nurse does at the point-of-care. The second challenge would

be to develop a valid quantitative measure of the unit-level culture. The importance that the unit-culture has on nurses' use of research has only been recently illuminated and this study is one of the first studies to identify the importance of the unit culture to nurses' engagement in all three dimensions of EBP.

Once key variables are determined and valid measures developed, testing of the integrated model can occur. Mixed-methods research is infrequently used in this line of research; perhaps, given the complexity and interrelationships of the variables, mixed-methods research may provide vital insights on how the environment, individuals, and leaders interact to facilitate the EBP process and how this all influences patient outcomes. Ultimately, this will advance the science of EBP implementation and maintenance by providing the ability to identify interventions, which will increase the use of EBP. Then these interventions can be tested to see if they make a difference. This will help assure that patient/family's receive care that is evidence-based and patient/family centered.

Conclusion

The purpose of this study was to identify the influence that the unit culture had on nurses' adoption of EBP. It was discovered that not only the unit culture but also the hospital culture and unit-level nurse leaders were vital to the creation of an environment in which EBP could flourish. These findings coalesced into a refined multilevel theoretical model, which explains and describes how nurses implement and maintain EBP in the acute care setting. The creation of this theory-based multilevel model fills a void in the literature and will help move this line of research forward. Before the model can be tested, further exploration of the hospital-level culture and unit-level nurse leader characteristics needs to occur as well as the development of valid measures that captures what is occurring in the model.

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Appendix A

Emory University Nell Hodgson Woodruff School of Nursing Consent to be a Research Subject

Title: The Magnet Journey: Understanding the Role of Unit Culture in EBP Adoption

Principal Investigator: Kim Schippits RN, MS

Co-Investigator: Gerri Lamb, Ph.D.

Funding Source: The Agency for Healthcare Research and Quality Dissertation Grant 1R36HSO18233-01.

Introduction and Purpose

You are invited to volunteer for a research study on how the unit culture affects adoption of evidence-based practice (EBP). This form is designed to tell you everything you need to think about before you decide to consent (agree) to be in the study or not to be in the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study. I am asking you to participate because you have worked a minimum of one year and currently work at least 16 hours/week on the day/evening shifts Monday through Friday on your unit. It is expected that 40 nurses, 10 from each of the four units, will be interviewed for this research study. The interview is expected to last between 60-90 minutes. The decision to join or not join the research study will not affect your employment status in any way. This study is being conducted for my dissertation under the direction of Dr. Gerri Lamb.

Procedures

If you agree to participate, I will interview you for about an hour at a mutually agreed upon location. The questions will be about your perceptions of your unit's culture, evidence-based practice, the magnet journey, and how they influence each other. I will audio record the interview with your consent. The voice recordings will be transcribed and immediately destroyed. I ask that you be open and honest in your comments and please keep everything you share within your interview confidential. Please refrain from mentioning patients' or staff members' names. Any names on the transcription will be given pseudonyms.

Risks and Discomforts

There are no foreseeable risks of physical harm associated with this study. The main risk in this study is a potential break in confidentiality. Your name will not be shared after the interview in either spoken or written materials and your comments will only be shared anonymously with my study team. I will keep all interview materials in a locked cabinet or on a password protected secure server. Your participation is voluntary and you have the right to refuse to be in this study. You also have the right not to talk about any topic.

Benefits

Taking part in this research study may not benefit you personally. The information you provide, however, will add to our knowledge about how the unit culture influences the adoption of EBP.

Compensation

At the completion of the interview, you will be given \$50.00 in consideration for your time.

Confidentiality

I will use a pseudonym instead of your name when reporting study results. All information that you provide will be kept private in a locked cabinet and/or on a computer that is password protected. When study results are presented or published, your name or other facts that might point to you will not be presented.

Certain offices and people other than those doing the research may look at your study records. Government agencies and Emory employees overseeing proper study conduct may look at your study records. These offices include the Emory Institutional Review Board, the Emory Office of Research Compliance, and the Agency for Healthcare Research and Quality. Emory will keep any research records we produce private to the extent we are required to do so by law. Study records can be opened by court order or produced in response to a subpoena or a request for production of documents.

Withdrawal from the Study

Participation in this research is voluntary. You may refuse to participate, or refuse to answer any questions that you do not want to answer. If you decide to be in this study and change your mind, you may withdraw at any time. Your participation or non-participation will have no negative repercussions.

Questions

If you have any questions, I invite you to ask them now. If you have any questions about the study later, you may contact me at kmschip@emory.edu or 609-903-7475. You may also contact my advisor, Dr. Gerri Lamb at glamb@emory.edu or 520-979-4838. If you have questions about your rights as a research subject or if you have questions, concerns, or complaints about the research, you may contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or irb@emory.edu.

Consent

I will give you a copy of this consent form to keep. Do not sign this consent form unless you have had a chance to ask questions and get answers that make sense to you. Please sign below if you agree to participate in this study.

Name of Participant

Signature of Participant

Date

Principal Investigator

Date

Appendix B
MJH Recruitment Poster

Would you like to tell your story?

Please consider participating in a research study that is interested in finding out what it is like to work here!

Registered nurse inclusion criteria:

- 1. Must have worked at least 1 year on the unit**
- 2. Must work at least 16 hours/week**
- 3. Must work primarily day and/or evening shift Monday through Friday**

Please contact Kim Schippits RN, Doctoral Student at 609-903-7475 or kmschip@emory.edu to schedule a 1-hour interview at a time convenient to you. You will also be paid \$50 at the end of the interview! This research is supported by an AHRQ grant # 1R36HSO18233-01

Appendix C
MH Recruitment Poster

Participants Needed for Research Study

I am looking for nurses to take part in a study on how the unit culture constrains or facilitates their ability to engage in EBP.

As a participant in this study, you will participate in a confidential interview that will be audio taped. The interview should last 1 to 1 ½ hours and will occur at a time and location that is convenient to you. In appreciation for your time, you will receive an incentive at the completion of the interview.

Registered nurse inclusion criteria:

1. Must have worked at least 1 year on the unit
2. Must work at least 16 hours/week
3. Must work primarily day and/or evening shift Monday through Friday with weekend rotation

For more information about this study, or to volunteer for this study please contact:

Kim Schippits RN, MS, Doctoral Student
at

609-903-7475 or kmschip@emory.edu

This research is supported by an AHRQ grant # 1R36HSO18233-01

Appendix D
Recruitment Email and/or Letter

Kim Schippits
10420 N. McKinley Drive
Apt 12312
Tampa, FL 33612
609-903-7475
kmschip@emory.edu

February 5, 2010

To Whom It May Concern:

I am a doctoral student at Emory University and I am very interested in understanding your perceptions of your unit culture, evidence-based practice, and the magnet journey. My dissertation is titled "The Magnet Journey: Understanding the Role of the Unit Culture in EBP Adoption" which is funded by the Agency for Healthcare Research and Quality (AHRQ) Grant number: 1R36HSO18233-01.

Participation in this study is voluntary and you may withdrawal from the study at any time. There are no personal risks or benefits if you decide to participate. Your decision to participate or not will have no affect on your employment status. I will conduct a 60-90 minute in-depth interview, which will be audio taped at a date, time, and location that is convenient to you. If you do agree to be interviewed, you will be paid \$50 in consideration for your time at the end of the interview. To be considered for this study, you must be a registered nurse who has worked on this unit for one year, currently work a minimum of 16 hours/week on the day and/or evening shifts Monday through Friday.

In any research study, confidentiality is a concern. To address this concern, I will remove all identifying information attached to the interview data – this will entail the use of pseudonyms and deleting names of peers and patients that appear in the interview transcript. Once the audio recording of the interview is transcribed and verified, it will be destroyed. The de-identified interview transcripts will be stored on a password protected secure server. The log that connects the participant to the interview and the signed written informed consents will be kept separate from the interview transcripts in a locked cabinet. Members of my dissertation committee will only have access to the de-identified data. I will also conduct "member checks" by sharing my interpretations and conclusions from the data with the participants so they can verify the accuracy of the analysis and assure that no member of the group feels she/he can be identified by what is written.

If you are interested in talking about your unit, EBP, and the magnet journey, please call me at (609) 903-7475 to arrange an interview. I look forward to listening to what you have to say!

Thank you,

Kim Schippits, RN, MS
Doctoral Student
Emory University

Appendix E
MJH Informed Consent

INFORMED CONSENT

Name of Research Study: The Magnet Journey: Understanding the Role of Unit Culture in EBP Adoption

Study Sponsor: Agency for Healthcare Research and Quality Dissertation Grant # 1R36HS018233-01

Principal Investigator: Kim Schippits, RN, MS

Sub Investigator: Gerri Lamb, RN, PhD, FAAN

You are being asked to participate in a research study on how the unit culture affects adoption of evidence-based practice (EBP). **The purpose of this form is to provide you with enough information so you can understand the possible risks and benefits of participating in this study and decide whether or not you want to be part of this research study.**

This study is being conducted by Kim Schippits, RN, MS who is a doctoral candidate at Emory University and completion of this study will fulfill partial degree requirements. This study will take place at Blank Hospital and Blank Hospital. Blank Hospital reviews research studies through its Research Ethics Review Board (also referred to as an institutional review board), but is not an investigator in this study and does not supervise or direct the study.

You need to read the following material to make sure that you are informed about this study. You will have a chance to discuss any questions you have with Kim before signing this form. Signing this form shows you have been informed, have had all your questions answered to your satisfaction and shows you give your consent to participate. If you wish to participate in this study, you must sign this form.

This consent form may contain words that you do not understand. Please ask Kim to explain any words or information that you do not understand.

PURPOSE OF THE STUDY:

You are being invited to take part in this research study, which seeks to understand how the unit culture affects adoption of evidence-based practice (EBP).

PROCEDURE:

Should you choose to participate in this study, I will interview you for about an hour at a mutually agreed upon location. The questions will be about your perceptions of your unit's culture, evidence-based practice, the magnet journey, and how they influence each other. I will audio record the interview with your consent. The voice recordings will be transcribed and immediately destroyed. I ask that you be open and honest in your comments and please keep everything you share within your interview confidential. Please refrain from mentioning patients' or staff members' names. If you do happen to mention names during the interview, they will be replaced with pseudonyms when they are transcribed.

It is anticipated that your participation in this study will last for about 60-90 minutes.

BENEFITS:

Taking part in this research study may not benefit you personally. The information you do provide, however, will add to our knowledge about how the unit culture influences the adoption of EBP.

RISKS/SIDE EFFECTS:

There are no foreseeable risks of physical harm associated with this study. The main risk in this study is a potential break in confidentiality. Your name will not be shared after the interview in either spoken or written materials and your comments will only be shared anonymously with my study team. I will keep all interview materials in a locked cabinet or on a password protected secure server. Your participation is voluntary and you have the right to refuse to be in this study. You also have the right not to talk about any topic that is discussed.

COMPENSATION:

At the completion of the interview, you will be given \$50.00 in consideration for your time.

OTHER FINANCIAL INTEREST(S):

There are no conflicts of interests related to the conduct of this study.

YOUR RIGHTS:

Signing this consent does not waive any of your legal rights.

You have the right to not take part in the study. If you choose not to take part, this will not affect your job in any way. If you choose to take part, you are still free to leave the study at any time and you do not have to give a reason.

PRIVACY AND CONFIDENTIALITY OF STUDY RECORDS

I will use a pseudonym instead of your name when reporting study results. All information that you provide will be kept private in a locked cabinet and/or on a computer that is password protected. When study results are presented or published, your name or other facts such as the name of the hospital and unit that might point to you will not be presented.

Certain offices and people other than those doing the research may look at your study records. Government agencies and Emory employees overseeing proper study conduct may look at your study records. These offices include the Emory Institutional Review Board, Blank's IRB, Blank's IRB, the Emory Office of Research Compliance, and the Agency for Healthcare Research and Quality. Emory will keep any research records we produce private to the extent we are required to do so by law. Study records can be opened by court order or produced in response to a subpoena or a request for production of documents.

CONTACTS:

You may discuss any questions or concerns you may have at any time before, during or after participating in this study with Kim Schippits (609-903-7475; kmschip@emory.edu; 10420 N McKinley Dr. #12312, Tampa, FL 33612).

If you wish further information regarding your rights as a research subject, you may contact a representative of the Research Department of Blank Hospital at [phone number deleted].

VOLUNTARY PARTICIPATION/WITHDRAWAL:

You are free to decide whether or not to participate in this research study. If you choose to participate, you may withdraw from this study at any time without negative repercussions.

CONSENT:

I have read and understand the above information. I have been given the opportunity to ask questions, and my questions I had about this research study have been answered. Based upon this information, I agree to participate in the Magnet Journey: Understanding the Role of Unit Culture in EBP Adoption research study.

I have been told that I will receive a signed copy of this consent form.

(Print participant name)

_____/_____/_____
(Date*: day /month/ year)

(Signature of participant)

I have fully discussed this research study with the participant using a language that is appropriate and understandable. I believe that the participant understands the nature of this study and the possible risks and benefits involved in participating. I certify that I have encouraged the participant to ask questions and that all questions asked were answered.

(Print Investigator name)

_____/_____/_____
(Signature of Investigator) (Date*: day /month/ year)

* date should be completed by each person completing the signature line

Appendix F
MH Informed Consent

Adult Informed Consent

Hospital Identifier Deleted

Information for People Who Take Part in Research Studies

The following information is being presented to help you decide whether or not you want to be a part of a research study. Please read carefully. Anything you do not understand, ask the researcher.

Title of Study:	Understanding the Magnet Journey: The Role of Unit Culture in EBP Adoption
Principal Investigator:	Kim Schippits RN, MS
Sub Investigators:	Gerri Lamb RN, PhD, FAAN; [person affiliated with hospital deleted]
Study Location(s):	Blank Hospital and Blank Hospital

General Information about the Research Study

You are invited to volunteer for a research study on how the unit culture affects adoption of evidence-based practice (EBP). This form is designed to tell you everything you need to think about before you decide to consent (agree) to be in the study or not to be in the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study. I am asking you to participate because you have worked a minimum of one year and currently work at least 16 hours/week on the day/evening shifts primarily Monday through Friday on your unit. It is expected that 40 nurses, 10 from each of the four units, will be interviewed for this research study. The interview is expected to last between 60-90 minutes and will be audio recorded. The decision to join or not join the research study will not affect your employment status in any way. This study is being conducted for my dissertation under the direction of Dr. Gerri Lamb and is funded by the Agency for Healthcare Research and Quality Dissertation Grant #1 R36 HS018233-01.

If you agree to participate, I will interview you for about 1 to 1 ½ hours at a time and location that is convenient to you. The questions will be about your perceptions of your unit's culture, evidence-based practice, the magnet journey, and how they influence each other. I will audio record the interview with your consent.

The number of other people that might take part in this study at this local site is 19.

Benefits of Being a Part of this Research Study

- Taking part in this research study may not benefit you personally. The information you provide, however, will add to our knowledge about how the unit culture influences the adoption of EBP.

Risks of Being a Part of this Research Study

- There are no foreseeable risks of physical harm associated with this study. The main risk in

this study is a potential break in confidentiality, anonymity, or privacy. To reduce this risk, I will remove all identifying information attached to the interview data – this will entail the use of pseudonyms and deleting names of peers and patients that may appear in the interview transcript. Once the audio recording of the interview is transcribed and verified, it will be destroyed. The transcriptionist employed will receive audio files that are identified with pseudonyms. The de-identified interview transcripts will be stored on a password protected secure server. The log that connects the participant to the interview and the signed written informed consents will be kept separate from the interview transcripts in a locked cabinet. Members of my dissertation committee will only have access to the de-identified data.

I will also conduct “member checks” by sharing my interpretations and conclusions from the data with participants so they can verify the accuracy of the analysis and assure that no member of the group feels he/she can be identified by what is written. This will occur after interviews and analysis are completed at a time and location that is convenient for the nurse. If participants feel like something written readily identifies them or someone in the group, I will amend the document to assure that anonymity and confidentiality are maintained. This will entail making minor changes in the details, alter/disguise or eliminate irrelevant details. I will not publish the name of the hospitals or units where the research was conducted.

Your participation is voluntary and you have the right to refuse to be in this study. You also have the right not to talk about any topic.

Payment for Being a Part of this Research Study

- At the completion of the interview, you will be given \$50 in consideration for your time.

Sponsor Statement

- This study is funded by the Agency for Healthcare Research and Quality Dissertation Grant #1 R36 HS018233-01.

Confidentiality of Your Records

- I will use a pseudonym instead of your name when reporting study results. All information that you provide will be kept private in a locked cabinet and/or on a computer that is password protected. When study results are presented or published, your name or other facts that might point to you will not be presented.

Certain offices and people other than those doing the research may look at your study records. Government agencies and Emory employees overseeing proper study conduct may look at your study records. These offices include the Emory and Blank Hospital Institutional Review Boards, the Emory Office of Research Compliance, and the Agency for Healthcare Research and Quality. Emory will keep any research records we produce private to the extent we are required to do so by law. Study records can be opened by court order or produced in response to a subpoena or a request for production of documents.

Volunteering to Be Part of this Research Study

- Participation in this research is voluntary. You may refuse to participate, or refuse to answer any questions that you do not want to answer. If you decide to be in this study and change your mind, you may withdraw at any time. Your participation or non-participation will have no negative repercussions.

Questions and Contacts

- If you have any questions, I invite you to ask them now. If you have any questions about the

study later, you may contact me at kmschip@emory.edu or 609-903-7475. You may also contact my advisor, Dr. Gerri Lamb at glamb@emory.edu or 520-979-4838 or the Blank representative, [name and contact info deleted]. If you have questions about your rights as a research subject or if you have questions, concerns, or complaints about the research, you may contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or irb@emory.edu.

- If you have questions about your rights as a person who is taking part in a research study, you may contact the Chairman or a member of the Blank Institutional Review Board, at [phone number deleted].

Your Consent—By signing this form I agree that:

- I have fully read or have had read and explained to me this informed consent form describing a research project.
- I have had the opportunity to question one of the persons in charge of this research and have received satisfactory answers.
- I understand that I am being asked to participate in research. I understand the risks and benefits, and I freely give my consent to participate in the research project outlined in this form, under the conditions indicated in it.
- I will be given a signed copy of this informed consent form, which is mine to keep.

_____ Signature of Participant	_____ Printed Name of Participant	_____ Date and Time
_____ Signature of Person Obtaining Consent	_____ Printed Name	_____ Date

Investigator Statement

I have carefully explained to the subject the nature of the above protocol. I hereby certify that to the best of my knowledge the subject signing this consent form understands the nature, demands, risks and benefits involved in participating in this study.

_____ Signature of Investigator	_____ Printed Name of Investigator	_____ Date
------------------------------------	---------------------------------------	---------------

Appendix G Interview Guide

Background Information

First, I'd like to ask you a few background questions:

- [Record gender]
- What is your basic and highest degree in nursing?
- How long have you worked as a nurse?
- What hospital do you work at?
- How long have you worked there?
- What unit do you work on?
- How long have you worked on this unit?
- What is your position there?
- Are you FT/PT/PRN? (work minimum of 16 hr/wk)
- What shift (day/evening) do you primarily work?

Culture

I would like to get a general idea of what it's like to work on your unit.

- Tell me what a typical day is like for you on your unit.
 - Probes: overall work responsibilities, what is the routine/unusual, expected ways to get work done
- What do you value most about the nature of your work?
- What do you think draws people to work here?
- What first attracted you to this job? Why do you stay?
- How were you oriented and socialized to your unit?
 - Probe: How do you learn what to do around here?
 - Probe: What are new members taught? Why? Who believes it is important?
 - Probe: Is there a difference between how this occurs for experienced versus new nurses?
- What types of behaviors are rewarded and recognized on your unit? Example?
 - Probe: Why?
 - Probe: How do you receive feedback on your practice?
 - Probe: How do you know if you are valued or not?
- What are the core values that guide your practice on this unit? Can you give me examples?
 - Probe: What's really important around here? – “scared cows”
- What happens when someone makes a mistake on your unit? Can you give me an example?
 - Probe: Tell me how your unit deals with safety/quality issues.
- How does your unit solve problems? Example?

EBP

Now I'd like to talk about your experience with EBP.

- What comes to mind when you hear the words 'EBP'?
 - Probes: How do you feel about it? What are the benefits? Who does it on your unit?
- Can you give me an example of when you used EBP?

- Probes: What are the rewards for doing or not doing it? What difficulties did you encounter? What facilitated your ability to use EBP?
- Where do you get your information from?
 - Probes: How do you decide if it's good or not? How do you decide to use it or not?
- Can you give me an example of how you involve the patient/family into the care that you provide?
 - Probes: How do you get to know them? How do you know they understand their illness? How do you know they are able to process information?
 - Probe: How do they participate in care decisions?
 - Probe: What helps or hinders your ability to get to know your patient/family?
- Tell me about a recent practice change on your unit.
 - Probe: How was the decision made, how was it communicated, how was it implemented?
- Tell me about QI initiatives taking place on your unit.
 - Probe: How do they come about? What is your role?
- Can you describe the current status/use of EBP on your unit?

Magnet Journey/Designation

I understand that (hospital name) is a magnet/preparing for application to be a magnet hospital.

- Magnet Journey Hosp: How have things changed around here because of the magnet journey?
- Magnet Designated Hosp: How have things changed around here because of your hospital's Magnet designation?
 - Probe: How has your practice changed?
 - Probes: How has your unit culture (values, beliefs, norms) changed?
 - Probe: How have relationships changed?
 - Probe: How has your ability to engage in EBP changed?
- Can you describe what the magnet journey is/was like?
 - Probes: What changes have occurred? When did you first see/feel changes in the environment?
 - Probe: What worked best/least during this process?
- Can you describe the shared governance process at your hospital?
 - Probes: What are its benefits? Impact on pt care? Safety? Quality? EBP?
 - Probes: What is your role? Responsibility?
 - Probes: What are the opportunities for involvement? What options do you have to fix things?
- If you came upon a genie and they could grant you 3 wishes related to your work life, what would you hope for?

Closing

- Finally, is there anything you think that is important that we have not discussed?
- Is there anything you would like to go back to?
- Do you have any questions for me?
- May I contact you again if I need to clarify something that you have said?
Conducting valid research and maintaining confidentiality are very important to me. One method to help assure accuracy and confidentiality is to check back

with participants to make sure that my conclusions are what they meant and to make sure that participants don't feel like they can be identified by what I have written. May I contact you in the future so that you can validate my findings and make sure that you feel like you cannot be identified by what I have written?

Appendix H Revised Interview Guide

Background Information

First, I'd like to ask you a few background questions:

- [Record gender]
- What is your basic and highest degree in nursing?
- How long have you worked as a nurse?
- What hospital do you work at?
- How long have you worked there?
- What unit do you work on?
- How long have you worked on this unit?
- What is your position there?
- Are you FT/PT/PRN? (work minimum of 16 hr/wk)
- What shift (day/evening) do you primarily work?

Questions

Section I: What's it like to work here...

- Tell me what a typical day is like for you.
- What do you like about your work? Dislike?
- What do you wish you could change about your work?
 - How would you go about doing this?
 - What helps? Hinders?
- What would make your work better?
 - What are you trying to make better on your unit? (current PI/QI)

Section II: Relationships

- Tell me about your relationship with the physicians on your unit.
 - What do you like or not like about MD relationships?
- Tell me about the different groups of nurses that work here.
 - What are your relationships with the nurses like?
 - What do you like or not like about RN relationships?
- Tell me about your relationship with unit leadership (TL/Chg RN, NL, NM).
 - What do you like about it? Dislike?
- Tell me about your relationship with the pt/families on the unit.
 - What do you like or not like about pt/family relationships?
 - How does the pt/family relationship impact decisions that you make?
 - How do you involve them in care decisions?
- How do you feel nurses are viewed by everyone else?
- How do you feel doctors are viewed by everyone else?
- How do you feel unit leadership is viewed by everyone else?

Section III: Decision-making, RU/EBP, Magnet

- How do you know what to do for a patient?
- Tell me about a situation you encountered that you didn't have experience with - what did you do?
- What do you do when you see unsafe care/practices?

- Tell me about a time when you felt the pt needed more than what they were getting.
- Have you heard about EBP?
 - What does it mean to you?
 - What helps and what hinders?
- Have you heard about shared governance?
 - What does it mean to you?
 - What helps and what hinders?
- Have you heard about magnet?
 - What does it mean to you?
 - What change has impacted your practice the most?
 - How has your practice changed?
 - How have your relationships changed? (RN, MD, leadership, pt/family)

Section IV: Miscellaneous

- What behaviors are rewarded and recognized on your unit?
- How do you know that your unit gives good nursing care?
- What types of things can you become involved with on your unit?
- How would you describe your unit to a friend who was applying for a job?
- How do you get feedback on your practice?

Section V: Purpose

- What is your purpose? Why are you here?
- Why do you stay?

Closing

- Finally, is there anything you think that is important that we have not discussed?
- Is there anything you would like to go back to?
- Do you have any questions for me?
- May I contact you again if I need to clarify something that you have said?
- Conducting valid research and maintaining confidentiality are very important to me. One method to help assure accuracy and confidentiality is to check back with participants to make sure that my conclusions are what they meant and to make sure that participants don't feel like they can be identified by what I have written. May I contact you in the future so that you can validate my findings and make sure that you feel like you cannot be identified by what I have written?

Appendix I Coding Matrix

***Change – Easy/Difficult**

- *Behavioral beliefs towards change
- *Control beliefs about change
- *Normative beliefs about change

Cognitive Beliefs towards EBP

Behavioral beliefs – positive/negative

Control beliefs

- *Resources and supplies
- *Experience guides practice
- *Embedded evidence
- *Info sources
 - *Peer (experience)
 - *Computer
 - *MD
 - *Protocols, orders, standards
 - *Experience

Normative beliefs

- Peers
- Nrsg Mgmt
- *MDs
- *Others

***Communication – Good/Bad**

- *RN-RN
- *RN-Pt/family
- *RN-Nurse Leaders
- *RN-MD
- *MD-Pt/family
- *MD-MD

EBP

Evidence – Included/Excluded

Expertise – Included/Excluded

Patient/family preferences – Included/Excluded

EBP Perception

***Expectations – Follow/Don't follow**

Espoused value and belief

Norm

***Patient Care – Good/Bad**

***Patient Centeredness – Present/Absent**

Problem-resolution – Positive/Neutral/Negative**Relationships – Good/Bad**

*RN-RN

*RN-Pt/family

*RN-Nurse Leaders

*RN-MD

*MD-Pt/family

*MD-MD

Bold face type indicates main category

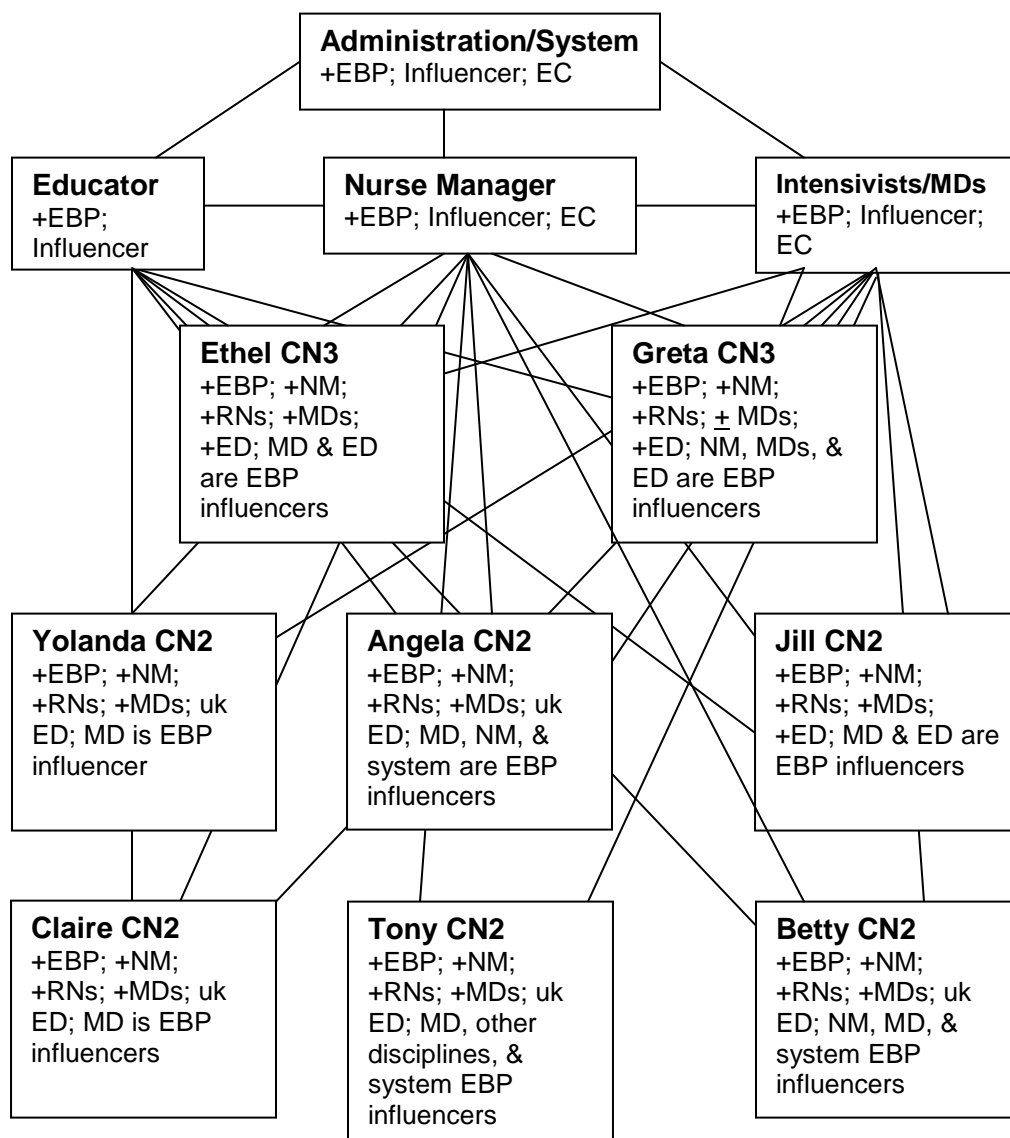
Plain type indicates individual codes

*An asterisk indicates code was added during data collection process

Appendix J
Abbreviated MJH MS Unit Data Summary Matrix

	Communication	Part of Decision-making	Fix things or improve things	EBP
Jennifer	<p>NL not receptive. Maybe hear us but nothing changes.</p> <p>Labeled complainer.</p> <p>Lack communication regarding changes.</p> <p>Don't hear much feedback on how I'm doing.</p> <p>Unaware going for Magnet.</p>	<p>NL/TL make decisions and we can have minimal or no input to tweak</p> <p>Some RNs don't want responsibility of making decisions by voicing concerns.</p> <p>Shared gov doesn't work; we are not heard.</p>	<p>People don't speak up because nothing changes.</p> <p>Complain multiple times before things are fixed or sometimes not fixed.</p> <p>Lack supplies and equipment and doesn't change; delivery system slow.</p>	<p>Uses it via core measures.</p> <p>RN: Uses educator.</p> <p>MD: no info</p> <p>Info source: others</p> <p>Computer: meds, diseases; looking up P&P hard so I Google it; looks for complicated description; uses Wikipedia.</p>
Mary	<p>Conversion of break room to office not communicated. NL not receptive to my concerns about break room conversion.</p> <p>Labeled complainer.</p> <p>Complain at staff meeting; heard but nothing changes.</p> <p>Mostly hear when you are doing something wrong.</p>	<p>NL & TL make decisions and we can 'tweak'.</p> <p>It's shoved down your throat; have no say in how things are but told that we do.</p> <p>NL hired TL replacement without staff input; yet, said we would have input.</p> <p>Shared gov not there.</p>	<p>Multiple complaints about MD before something done.</p> <p>We state ideas but don't know what happens with them; I'm not part of decision-making.</p> <p>We'll never get to Magnet because there is too much dissatisfaction, too little teamwork, & not enough action.</p>	<p>Everything is based on evidence; standards that you learn in school.</p> <p>Info sources: people</p> <p>Computer: meds on intranet; diseases on internet; Google and pick reputable site (CDC) that I know of.</p>
Lucy	<p>NL asks if I need help; does things for me.</p> <p>NM/Dir asks how day going.</p> <p>Annual eval.</p> <p>Staff meeting monthly: NSIs.</p> <p>Has not heard of magnet</p>	<p>NL & TL decide what to do about falls; don't know where get ideas.</p> <p>Had shared gov for a while; not there anymore and don't know why.</p>	<p>Some techs poor performers; talk to TL and they talk to tech.</p> <p>Bad techs orient new techs and create problems.</p> <p>Lack of supplies long standing issue and not worked on.</p> <p>Missing wound care supplies so I improvise.</p>	<p>EBP in pressure ulcer standards and supplies (needle less system, stat lock)</p> <p>Info source: people</p> <p>Computer: younger RNs do it for her; prefers books.</p>

Appendix K MH ICU Context Chart



Legend

EBP is attitude to EBP measured as +, ±, or –
 Character of relationship with NM, RNs, MDs, and ED measured as +, ±, or –
 uk is unknown
 EC is an EBP Champion
 EBP influencers are people perceived to influence the process
 NM is the Nurse Manager
 CN3 are Clinical Nurse Level 3 (Charge Nurse)
 CN2 are Clinical Nurse Level 2
 ED is the Educator