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The Use of Positive Deviance to Deliver Patient-Centered Care

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THE USE OF POSITIVE DEVIANCE TO DELIVER PATIENT-CENTERED CARE

by

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Abstract

What happens when critical care nurses find themselves in situations where patient care needs are not covered by practice guidelines or standard orders or when the needs conflict with those guidelines and orders? Sometimes usual practices such as call the supervisor, call the physician, or follow the protocol just do not meet the needs of the patient at the exact time and place. Experienced critical care nurses often discuss such situations in private; however, there is little information in the literature about the types of situations encountered and the decision- making processes used in these situations.

Those discussions that were once shared only in private were shared anonymously using an online policy Delphi methodology to explore the care provided by experienced critical care nurses in situations where standard practice guidelines did not fit the needs of the specific care situation. Utilizing the descriptions gained from this research, patient-centered nursing care can be understood and can lead to further exploration of the outcomes of positively deviant nursing care.

The long-term goal of this research was to bring to light the care provided by nurses in situations where practice guidelines were lacking and ultimately provide some answers and support for how nurses can provide care at the beside that is truly patient-centered. The results of this project are presented here in the form two manuscripts, a concept analysis of positive deviance in critical care nursing and a research study investigating the presence and nature of positive deviance in critical care nursing.

Chapter 1: Overview of the Research Study

The work in critical care is complicated, and the care of critically ill patients is not straightforward; "On any given day in the United States alone, some ninety thousand people are admitted to intensive care" (Gawande, 2009, p. 23). The average length of stay in critical care is four days with an 86% patient survival rate. The typical patient requires 178 individual actions per day ranging from administering a drug to suctioning the lungs (Gawande, 2009). Critical care nurses routinely use an array of technical skills, follow a professional code of conduct, and use situation-specific know-how to deal with these complex and acutely ill patients (Mattox, 2012; Tuckett, 1998). Specific decision-making situations in the clinical setting contain multiple conditions of certainty, uncertainty, and risk (Huber, 2010).

Per the 2003 Institute of Medicine (IOM) report, clinical judgments should center on the patient and reflect best practices. In the effort to provide care that is patient centered in the absence of specific guidelines for best practice, nurses often do the best they can with the knowledge and skills that they have available. This project is an investigation of the those practices that nurses employ when patient centered care demands going beyond that which is reflected in current practice guidelines. First, this practice needed a name, what is this behavior called? Other disciplines have used the term positive deviance when describing actions that deviate from the norm or standard in

a positive direction, in other words, actions made to improve or better a situation (Gary, 2011).

This dissertation journey marks the beginning of a quest to investigate positive deviance in nursing. Three major goals guided this research: to describe the concept of positive deviance within the context of nursing practice, to determine the presence and extent of positive deviance in critical care nursing practice, and to explore the judgments of expert nurses regarding specific acts of positive deviance.

Introduction of the Articles

The first manuscript, entitled *Exploring the Concept of Positive Deviance in Nursing*, provided the conceptualization for the study. *Positive deviance* is an intentional act of breaking the rules for a greater good. For nurses, the rightness or wrongness of this type of action will be decided by external persons in charge of rules enforcement; however, the decision to engage in positive deviance lies solely with the nurse. The concept analysis explored and identified the essences of the term *positive deviance* in the nursing practice environment.

The Walker and Avant (2005) method of concept analysis was used to provide a common understanding of positive deviance and to clarify the meaning to the nursing profession. Because the concept of positive deviance lacks consistent definition, this manuscript provided an operational definition of positive deviance in nursing as intentional and honorable behavior which departs or differs from an established norm and which contains elements of innovation, creativity, and/or adaptability; it also involves risk. Positive deviance can occur when the normal actions expected of the nurse collide with the nurse's view of the right thing to do to provide patient centered care.

The second manuscript entitled *The Wicked Question Answered: The Use of Positive Deviance to Deliver Patient-centered Care* was an examination of nursing care when standard practice guidelines did not meet patient specific care needs. Various viewpoints related to the use of positive deviance by experienced critical care nurses to provide patient-centered care were investigated. A model of positive deviance within complexity science was used to structure the research and a wicked question was posed: "Have you ever deviated from standard practice guidelines to deliver patient-centered care?"

The Delphi technique was used to gather data to answer the wicked question and to explore the nature and extent of positive deviance in critical care nursing. A panel of critical care nurses provided 67 unique examples of positive deviance in eight thematic categories. Through exploration of the extent to which the panel of nurses agreed or disagreed with each example, the statements were further reduced to four thematic categories for discussion and recommendations.

Results show that the concept of positive deviance is viable in the picture of nurses' decisions for care when guidelines are lacking. There are pragmatic suggestions offered on future development trends toward supporting nurses in providing patient-centered care. Attention should focus on guidelines to reduce the need for positive deviance: in emergent care situations, in end of life care, when communications are counter-productive or decision making strategies are not clear, and when there are obstacles to patient visitation.

Chapter 2: Exploring the Use of Positive Deviance in Nursing

Abstract

Positive deviance is an intentional act of breaking the rules for a greater good. For nurses, the rightness or wrongness of this type of action will be decided by external persons in charge of rules enforcement; however, the decision to engage in positive deviance lies solely with the nurse. This concept analysis explores and identifies the essences of the term *positive deviance* in the nursing practice environment. The Walker and Avant (2005) method of concept analysis is used to provide a common understanding of positive deviance and to clarify the meaning to the nursing profession. Because the concept of positive deviance lacks consistent definition, this paper provides an operational definition of positive deviance as intentional and honorable behavior which departs or differs from an established norm and which contains elements of innovation, creativity, and/or adaptability; it also involves risk for the nurse. This article provides a basis for decision-making when the normal actions expected of the nurse collide with the nurse's view of the right thing to do.

Key Words: *positive deviance; concept analysis; nurses; clinical decision making; standard practice guidelines*

Manuscript

Professional nursing standards are used to guide patient care services and set foundations for best practices. Decision-making in nursing contains multiple conditions of certainty, uncertainty, and risk (Huber, 2010). For nurses, the clinical setting contains an infinite assortment of situations that requires utilization of technical skills, a professional code of conduct, and situation-specific knowledge (Tuckett, 1998). Standards may not be available to guide nurses or may not be realistic for implementation at the point of care in specific situations. Nurses may be forced to react creatively to meet the needs of their patients. It is proposed that some nurses use positive deviance to guide actions in such situations.

The term deviance can be emotionally charged, evoking a wide range of images and interruptions, most of them likely to be aberrant or elicit disapproval. The term is widely used throughout business, management, sociology, criminology, and even healthcare. As concepts are a basis for theory building, an analysis of the concept of positive deviance will contribute new information to the science of nursing. There is no uniform definition of the concept of positive deviance for nursing. The purpose of this paper is to explore and identify the essence of the term *positive deviance* in the nursing practice environment using the Walker and Avant (2005) procedure for concept analysis. The intended outcome of this analysis is the increased understanding of what positive deviance is and is not within the context of professional nursing practice.

Selection of the Concept

Little discussion is found in the nursing literature to clarify the concept of positive deviance as a distinct behavior. There is modest exploration in nursing literature on how nursing provides patient-centered care within the realm of standard practice guidelines. Positive deviance is suggested as a behavior utilized by some nurses to provide care to their patients. Examination of this concept will provide a pathway for nurses providing bedside care with an emphasis on how positive deviance influences patient outcomes. Conceptual clarification will assist in identifying and naming instances of positive deviance in nursing practice, thereby improving communication between and among healthcare disciplines regarding care delivery decisions in specific clinical situations.

Concept analysis is a strategy that allows examination of the attributes or characteristics of a concept and the sub-concepts contained within them. Identifying a concept's defining attributes or characteristics facilitates a decision on which phenomena are good examples of the concept and which are not (Walker & Avant, 2005). The Walker and Avant (2005) method is a modified version of Wilson's 1963 writings to describe a systematic method for undertaking analysis of a nebulous term which may have multiple meanings. In this analysis, the concept of positive deviance is selected, all possible uses of the concept are explored, and defining attributes of the concept are determined along with identification of antecedents and consequences. Finally, case exemplars are presented, and nursing implications are discussed. The purpose of the analysis is to clarify the meaning of positive deviance within the context of the nursing clinical practice.

Uses of the Concept of Positive Deviance

An Oxymoron or Viable Behavior

Polet, Vanderaegen, and Amalberti (2003) described deviations as a normal part of the process of any work. To label someone as deviant implicates their behavior as harmful in some way (Dehler & Welsh, 1998). The term positive deviance was first used in broadening the discipline of organizational behavior (Dodge, 1985). The term has been previously judged as an oxymoron that lacks a consistent definition (Goode, 1991). In their book dedicated to the concept as a process, Pascale, Sternin, and Sternin (2010) described it as "an awkward, oxymoronic term" (p.3).

Robinson and Bennett (1995) developed a typology of deviant workplace behavior that focused on voluntary violations of norms that threaten the well-being of an organization. Vardi and Wiener (1996) defined organizational misbehavior as any intentional action by members of organizations that violate social, moral, and/or standard conduct norms. Warren (2003) criticized these definitions of deviance as they do not account for the societal dangers of employee blind compliance as well as not clearly stating which societal values will be used to determine misbehavior. Warren (2003) conceptualized deviance from a behavioral approach highlighting the significance of reference groups and normative standard as the basis for categorizing deviant behavior. The criteria for these deviant behaviors included positive ones that break or depart from reference group norms and are socially or organizationally beneficial. Warren further noted that while organizational and societal interest may overlap, some variations usually exist. To relate this idea to nursing practice, standards are instilled to provide models of best practices; nevertheless, there is variation that exists in specific patient care situations.

Spreitzer and Sonenshein (2004) developed a definition of positive deviance in providing a conceptual framework for understanding, identifying, and explaining positive, norm-departing behaviors. They cited an example of disobeying orders to dump toxic waste into a river as constituting deviance. The authors described the normative formulation of positive deviance as intentional behavior that significantly departs from norms of a referent group in honorable ways (Spreitzer & Sonenshein, 2004). The implication of a normative description of positive deviance is that of an evaluative term to identify conduct that ought or ought not to occur. Positive deviance acknowledges that expertise is widely distributed and that those on the front line, such as nurses at the bedside, may have a better sense of what is working for patients than the managing body or standard practice guidelines (Clancy, 2010).

In sociology, business, organizational behavior, as well as nursing management and healthcare administration, positive deviance is viewed as unprescribed practices or strategies that produce better outcomes than traditional standard practices (Abrahamson, Najjar, Schilling & Doebbeling, 2010; Appelbaum, Iaconi, & Matousek, 2007; Bloch, 2001; Bradley et al., 2009; Clancy, 2010; Dehlar & Welsh, 1998; Dodge, 1985; Fielding, Hogg & Annandale, 2006; Kim, Heering & Kols, 2008; Lindberg & Clancy, 2010; Lloyd, 2011; Luft, 2010; Marra et al., 2010; Marsh et al.2004, Melnyk & Davidson, 2009; Nowakoski, 2007; Pascale & Sternin, 2005; Pascale, Sternin & Sternin, 2010; Seidman & McCauley, 2008; Tarantino, 2005). The viability of the conceptual notion of positive deviance in a practice arena where lives are at stake remains to be seen.

As a Noun

Various terms and meanings are currently used to describe an individual who is a positive deviant. Bloch (2001) used the term trail blazers indicating that positive deviants are not afraid to leave the beaten path to go in a different direction in order to find a better way to get things done. Bloch described positive deviants as focused, persistent, optimistic in their pursuit, the people who make things happen in an organization, and crucial to the success of change efforts. Positive deviants are exceptional, high achieving individuals who exceed normal or average levels of performance in a group (Fielding, Hogg, & Annandale, 2006). Upon investigation of positive deviants in nursing, Clancy (2010) found that certain nurses were considered essential to a successful work environment. The positive deviant was described as the one who "always finds a way to get the job done", "is the glue that holds us all together" and "is extremely resourceful, knowledgeable, and adaptable" (p. 54). Positive deviants are atypical nurses who practice differently and more effectively (Clancy, 2010).

As a Process

Positive deviance is often viewed as a process or approach to organizational change as well as a framework for understanding organizational behaviors and problem solving (Abrahamson, Najjar, Schilling, & Doebbeling, 2010; Lindberg & Clancy, 2010; Lloyd, 2011; Marra et al., 2010; Singhal, Buscell & Lindber, 2010); as an alternative method of identifying best practices (Bradley et al., 2009; Tarantino, 2005); as a valuable tool for health policy makers in identification of innovative practice models (Abrahamson et al., 2010; Marsh et al, 2004); and as a problem-solving technique (Lloyd, 2011). In

business and policy realms, the process of positive deviance is seen as a facilitator to change.

Positive deviance, as a process, was spawned by Jerry and Monique Sternin of the Positive Deviance Initiative. The process has been used to combat inflexible problems, such as childhood malnutrition, sex trafficking of girls, and poor infant health; more recently it has been applied to the serious problem of hospital-acquired infections (Marra et al, 2010). Lindberg and Clancy (2010) viewed positive deviance as a process to solve a problem based on the belief that there are members in every organization whose different work practices produce better outcomes while utilizing the same resources available to the rest of the organization.

In nursing, the process of positive deviancy may take the form of a method of inquiry. Kim, Heerey, and Kols (2008) studied nurses who communicated especially effectively during a family planning consultation through what is labeled a positive deviance inquiry. Qualitative data collection allowed positive deviant factors to be identified in order to address challenges in nurse-patient communication of family planning. Those nurses who used a positive deviancy process of inquiry, when compared with similar nurses, described their professional knowledge and skills to be the most important factor enabling them to communicate effectively with patients. They fostered their inquiry method by improving their knowledge and skills through independent study as well as creating communication aids to use during communication sessions with patients (Kim, Heerey, & Kols, 2008).

As A Management Strategy

Positive deviance is suggested as a way to improve clinical performance outcomes in health systems. Lindberg and Clancy (2010) noted that in spite of the typical top-down hierarchy of the business and social worlds today, there seem to be subpopulations of people who figure out solutions to problems and solve them on their own using such techniques as persuasion, guidelines, or even laws to legitimatize their actions. Tarantino (2005) suggested that instead of relying on outside parties to determine best practices, an institution should identify and use the pre-existing knowledge and solutions that already exist within the institution.

Clancy (2010) described a situation in which many months of planning by management occurred prior to the use of an electronic medical record (EMR) by nurses. Upon implementation, the EMR process was perceived as cumbersome, and nurses began accumulating overtime due to documenting the bulk of their work after their shift. A few nurses were observed completing their EMR on time, and it was discovered that these positive deviants adapted and altered the hospital's prescribed practice after becoming frustrated with the recommended process from management. While going outside the hospital's usual process was not well received by the unit manager, Clancy (2010) noted that these *rogues* had solved a problem in a matter of weeks that a team had addressed for months. Clancy (2010) challenged managers of complex healthcare environments to uncover and make use of the creativeness of deviants in their organizations.

Defining Attributes of Positive Deviance

When characteristics of the concept appear repeatedly in literature, these are determined to be the attributes in the concept analysis (Walker & Avant, 2005). Based on

the characteristics most frequently associated with the concept as a behavior in literature (see Table 1), positive deviance:

- Is intentional and honorable
- Departs or differs from an established norm
- Contains elements of innovation, creativity, and/or adaptability
- Involves risk for the nurse

Intentional and Honorable

According to Bloch (2001), positive deviants have a strong achievement focus which supersedes the need to conform to rules. Spreitzer and Sonenshein (2004) specifically pointed to positive deviance as behaviors with honorable intentions independent of outcomes. When nurses see something that will not work, they are motivated to look for a new way to do it, not for the sake of being different, but because they desire successful patient care (Bloch, 2001).

Hutchinson's (1990) study showed that *responsible subversion* emerged as a construct and basic social-psychological process for nurses bending rules for the sake of their patients. The nurses' behaviors was deemed responsible because nurses used their best nursing judgment to decide what rules to bend, and when and how to do it. Nurses viewed themselves as responsible, but their actions were subversive because they violated hospital policies or medical orders. The nurses described themselves as acting responsibly in consciously planning what was best for the patient, but their behavior was described as subversive since they sometimes violated the State Nurse Practice Act. Hutchinson's (1990) review of literature on misbehavior in organizations found that

"misconduct in organizations has not only been viewed as pervasive, but, for the most part, as intentional work-related behavior" (p. 152).

Different

Dehler and Welsh (1998) pointed to a central theme of deviance as thoughts or actions that differ from something. Hutchinson (1990), in review of classic anthropological and sociological literature, examined how work gets done in spite of or in opposition to formal systems as well as when social situations described behaviors that were outside the commonly accepted norms. Hutchinson (1990) upheld that nurses who bend the rules for the sake of the patient are fully socialized and recognize that their values of patient advocacy are different from those of the organization.

Positive deviants are able to stand back and look for innovative solutions to problems. Bloch (2001) noted that positive deviants tiptoe around anarchy because they identify with the values of the organization and work to avoid negative outcomes from their deviance. An assumption in management literature is that the behavior required to overcome social norms in order to do something positive is distinctly different from the behavior required to overcome social norms in order to do something negative (Warren, 2003). These behaviors share a fundamental similarity: both require a departure from norms whereby employees must resist social pressure to conform (Warren, 2003).

Innovative, Creative, Adaptable

Dehler and Welsh (1998) argued that deviance is an important source of adaptive capacity in organizational transformation. They highlighted the concept of constructive deviance as being introduced by Hanke and Saxberg in 1985 from a combination of notions of *creative individualism*, *productive nonconformists*, and *opinion deviant* in

social theory. Army nurses are described as adapting quickly to practicing differently from how they learned to practice in order to accommodate their unique situations with creativity and innovation during times of war (McCall, 1993). The creativity and innovations of Army nurses solved the problem of the moment, ensured that the very best care was provided to soldiers, and became instrumental in the advancement of the professional practice of nursing (McCall, 1993).

Appelbaum, Iaconi, and Matousek (2007) classified positive workplace deviance as a pro-social behavior utilizing creativity and/or innovation when it diverges from organizational norms, the behavior is voluntary, and the intent is an honorable one. Innovation requires a departure from the organizational-accepted norms as innovative thinking involving the creation and development of new ideas that are not held by the majority (Appelbaum, Iaconi & Matousek, 2007). Dehler and Welsh (1998) noted that if all actions that violate norms are considered deviant, and there are multiple definitions of deviance, the implication is that a particular behavior may or may not be considered deviant as some may be adaptive in nature. Koerner (2009) described *active intelligence* as a way in which nurses draw on imagination and creativity in looking at current practice for other methods to accomplish or improve a task. Clancy (2010) describes this deviant behavior as creative and valuable in spite of frequently being perceived by supervisors and coworkers as resorting to workarounds which are outside the rules.

Risky For the Nurse

Positive deviance makes people uncomfortable, involves risk, and strays from rules in a positive manner (Appelbaum, Iaconi & Matousek, 2007). Stewart, Stansfield, and Tapp (2004) described how covert rules and expectations are often at play as nurses

decide whether or not to stretch the limits of their scope of practice. Most nurses practice warily with consideration of preserving their licenses. They realize that when they go outside the boundaries of hospital rules and protocols, they put themselves at risk. Positive deviant nurses know that they will be held accountable if there are negative patient outcomes, and they accept the risk in order to do what is best for their patients (Kramer & Schmalenberg, 2008). Rycroft-Malone et al. (2008) discussed the extension of traditional nursing roles as a concern for nurses largely because they are more open to liability.

Antecedents of Positive Deviance in Nursing

Antecedents are events or incidents that must happen prior to occurrence of the concept (Walker & Avant, 2005). In a functional aspect of deviance, evaluations of deviants are determined by the direction of their deviance and the extent to which the deviant behavior helps to satisfy the predominant group motivation (Fielding, Hogg, & Annandale, 2006). Positive deviance in nursing is proposed to occur when an antecedent situation, such as standard practice guidelines or hospital policies, limits the nurse's ability to provide patient-centered care. The concept of autonomy, actual or perceived, may also be a precursor for positive deviance in nursing.

Berner, Ives, and Astin (2004) acknowledged the potential dilemma for practicing nurses when standards of care also contain elements that require the nurse to break the aforementioned guidelines in instances where following them will compromise patient safety. A conflict exists when standard practice guidelines do not allow a nurse to provide care that meets the specific needs of the patient and clinical situation (Benner, 2005;

Hutchinson, 1990; Kramer & Schmalenberg, 2008). Some sense of conflict is an antecedent to positive deviance.

Consequences of Positive Deviance

Consequences are those events or incidents that occur as a result of an instance of the concept (Walker & Avant, 2005). The most pragmatic consequence of positive deviance in nursing appears to be the deviance itself. Rules are broken, standards practice guidelines are not followed, and the roles or scope of nursing responsibility are expanded. Other consequences involve the possibility of care that is undocumented; therefore, the outcomes of the deviations in care remain unreported. This can directly lead to a delay in the advancement of nursing practice as well as place the nurse in a tenuous legal and ethical situation.

There are times when nurses make decisions to go beyond or work-around standard practice guidelines (Berner, Ives, & Astin, 2004; Gordon, 2005; Stewart, Stansfield & Tapp, 2004). This care is often not documented and not reported (Clancy, 2010; McCall, 1993; Pascale & Sternin, 2005); therefore, the outcomes of the care are lost. In other words, nurses are not reporting the exact care they are providing; and therefore, there is no outcome data on positive deviance that occurs in the nursing practice environment. This ironically leads to false support for ineffective or insufficient protocols and policies which are the basis for the positive deviant nurses' work-arounds in the first place. It may be difficult to uncover positive deviance in nursing as nurses may be working against standard practice guidelines. In spite of broken rules, patients receive effective care, and new nursing knowledge which might be generated is lost to

the greater nursing audience. If reporting of deviant behavior could occur, then the consequent outcome data to change nursing practice would be forthcoming.

Example Cases

A Model Case

A model case provides a clear example of the use of positive deviance in nursing. The following patient care scenario includes all the defining attributes of positive deviance:

A nurse admitted a patient from the operating room post surgical intervention for a hip fracture. The patient was a petite 89-year-old female weighing less than fifty kilograms. Within an hour of being settled in the hospital room post surgery, the patient reported severe post-operative pain. The nurse consulted the routine post-operative order set from the orthopedic group. For pain management, the order set contained an as-needed order for two tablets of an oral analgesic as well as a dose of Meperidine (Demerol®) 100 milligrams to be delivered either intramuscularly or intravenously. The patient, who had been groggy since admission, had just taken a few ice chips; and the nurse decided against the oral analgesic due to risk of choking and possible aspiration. In considering the patient's age and weight, the nurse decided to administer 25mg of the Meperidine, evaluate the effectiveness after 30 minutes, and then administer another 25 mg if needed. The nurse was concerned with administering such a large dose to a small, elderly woman. Throughout the next eight hours, the entire dose of the originally ordered 100 mg of Meperidine was administered to the patient. The patient received relief from her pain during this time. Due to the electronic medication dispensing system, the nurse

only documented a one-time dose of 100mg of Meperidine administered to the patient an hour after arrival from surgery.

In this case, the behavior of the nurse exemplified the defining attributes of positive deviance. The decision to give the medication in delayed doses was intentional and honorable. The nurse departed from the established order set in an adaptive way to meet the needs of the patient. The behavior involved risk to the nurse as the medication was not given as ordered and then not documented as actually given. The act could be seen as prescribing a medication without a license and essentially is in conflict with most nurse practice acts. However, the outcome was one which resulted in pain relief and dedication to patient safety.

A Contrary Case

A contrary case represents the clearest example of what the concept is not (Walker & Avant, 2005). The case represents the exact opposite of the model case. A contrary case may be helpful in explaining what positive deviance in nursing is not.

An example of a contrary case of positive deviancy is: A nurse taking care of a patient after open heart surgery assessed that the patient's blood pressure was low. After consulting the standard post-open heart surgery orders, the nurse started an intravenous infusion drip of dopamine hydrochloride for the low blood pressure. The nurse continued to increase the dose to maintain adequate blood pressure per the medication protocol. In fact, the patient's hypotension was related to a state of negative fluid balance which is more safely and appropriately treated with fluid therapy rather than administration of medication. While administering the dopamine hydrochloride was following the physician's orders, it was ultimately not the best care for the patient. There was no

consideration of the interventions completed in the operating room during surgery such as the administration of diuretics and amount of blood loss that occurred during the case. The nurse followed the standard practice guidelines without consideration to the patient's specific needs in the situation.

In this case the nurse followed the standard practice guidelines. There was not a departure from the guideline. There are no elements of innovation, creativity, and/or adaptability to the specific situation. The nurse did not take into account the patient-specific information for the situation. The volume status data may or may not have been considered. Because the order set did not specify, the nurse did not perform further assessment of cardiac output status for the patient such as measuring central venous pressure from an already established central venous catheter or consider volume expanders as a priority option for this patient's situation. The nurse demonstrated risk-averse behavior by following the orders as written to start a dopamine drip to maintain the blood pressure at a certain level, even though there was potential risk to administering the positive inotropic medication to a volume depleted patient. The nurse followed orders and acted responsibly; whether the action was honorable depends on the ethical orientation of the appraiser.

In their book, Pascale, Sternin, and Sternin (2010) described positive deviance as a process which is not linear, does not rely on expert advice or best practices, and does not need authority. Conformity is the contrary of positive deviance, and conformity reduces stress to the nurse who faces dilemmas in role expectations by blindly following orders rather than straining against the rules to do the right thing (Dehler & Welsh, 1998).

Empirical Referents

Determining the empirical referents for the concept of positive deviance in nursing practice poses a difficult dilemma, but this consideration will contribute to the science of nursing. As defined by Walker and Avant (2005), empirical referents are classes or categories of actual phenomena that by their existence or presence demonstrate the occurrence of the concept. In order to show the impact of the behavior of positive deviance by nurses, instrumentation linked to the theoretical basis of the concept is needed (Walker & Avant, 2005).

Positive deviance is viewed through the lens of complexity science. This framework is used for examining the delivery of health care as complex, adaptive, and self-organizing (Fairchild, 2010; Wilson, 2009). This view fits with the unpredictable, disorderly, and unstable aspects of the health care system in which nurses provide patient care. The nursing profession embodies the four characteristics of complexity in human organizational systems: (a) Nurses work across interdisciplinary departments with many other health care providers, as well as with patients and families; (b) Nurses are required to perform multiple and varied tasks concurrently; (c) Nurses make clinical judgments, perform clinical interventions, and manage written and/or electronic communications and record keeping; and (d) The work of nursing is done in the fast-paced, uncertain health care environments in an effort to provide high quality, safe patient care (Fairchild, 2010). The complexity aspect of this framework makes linear measurement a challenge, while the moral dilemma of behavior occurring at the ethical edge provides a built-in reluctance to seek ways to reveal and measure the deviance.

There is no tool to measure positive deviance, but there is the possibility for evidence of its existence in literature. Berner, Ives, and Astin (2004) found that 92.2% of surveyed nurses were aware of legal limits when they made decisions in relation to patient care, and yet 70% of the sample report making decisions beyond those legal limits. Hutchinson (1990) noted that nurses tend to be more rule-bound in their capacity to engage in collaborative rather than autonomous practice. While it is not only accepted, but mandated, that administrators and physicians make autonomous decisions, most nursing actions occur within a set of rules or guidelines imposed by others. There is a practice dilemma when standard practice guidelines do not fit the needs of a specific patient care situation (Berner, Ives & Astin, 2004; Clancy, 2009; Estabrooks et al., 2005; Hutchinson, 1990; Kramer & Schmalenberg, 2008; Milton, 2006; Rycroft-Malone et al., 2008; Stewart, Stansfield & Tapp, 2004; Yonge & Molzahn, 2002). Scenarios from literature describe nurses who intentionally provide care beyond the scope of their practice (Kramer & Schmalenberg, 2008; Rycroft-Malone et al, 2008; Stewart, Stanfield & Tapp, 2004; Yonge & Molzahn, 2002). Nurses find creative ways to accomplish patient care through adaptations, work-arounds, modifications, and innovations that are different from standard practice guidelines (Abrahamson et al., 2010; Benner, 2005; Bradley, et al., 2009; Clancy, 2010; Kim, Heerey & Kols, 2008; Lindberg & Clancy, 2010; Luft, 2010; McCall, 1993; Melnyk & Davidson, 2009; Pascale, Sternin & Sternin, 2010; Stewart, Stanfield & Tapp, 2004). Nurses provide care in methods described as ‘under the radar’ or a ‘around the system’ (Gordon, 2005; Spenceley, Reutter & Allen, 2006). Nurses bend or break rules such as policies, orders, or the State Nurse Practice Act (Berner, Ives & Austin, 2004; Estabrooks et al., 2005; Hutchinson, 1990; Milton, 2006).

The gap in the literature is the understanding and descriptions of the care nurses provide in these situations as well as an acknowledgement and acceptance of the right and obligation of nurses to make autonomous decisions about care outside a strict interpretation of rules.

In order to measure positive deviance in nursing practice, the concept needs to be explored through qualitative inquiry into the care provided by nurses in situations where standard practice guidelines do not fit the needs of the specific care situation. The care delivered by nurses must be reported in order to have accurate outcome data in health care as well as further the nursing profession. Future research to stem from the measurement of positive deviance behavior would focus on why and how this phenomenon occurs and impacts health care delivery outcomes. As more healthcare professionals function as knowledge workers rather than task-driven care providers (Melnyk & Davidson, 2009), the incidence and dilemmas surrounding positive deviance will continue to grow.

Nursing Implications

This concept analysis raises awareness of the instances of positive deviance by nurses and a framework for viewing behaviors that do not conform to the norm. Marsh et al. (2004) suggested that insights into how and why positive deviant individuals behave differently from others can help develop strategies to promote desirable behaviors in healthcare. Nurses are challenged by professional development trends and policy changes to recognize the outcomes of healthcare and patient care experiences that are impacted by the decisions they make (Dowding & Thompson, 2003). A core challenge and opportunity in positive deviance studies is the linking of the qualitative findings and the

quantitative measures of those variables hypothesized to influence performance (Bradley et al., 2009).

Lewenson and Truglio-Londrigan (2008) proposed that nurses must balance their decisions for patient care between what evidence-based practice dictates, what is mandated by law, and what the situation demands. This may mean that in certain situations, a nurse may violate the professional ethical code by failing to be a patient advocate due to fearing the penalty of law. Gawande (2009), in his book *The Checklist Manifesto*, discussed times when the clinician just needs to take care of the patient and do what needs to be done. The question is raised as to when one follows personal judgment and when to rise to the occasion and do the right thing in responding to unexpected difficulties. This decisional aspect of positive deviance is what makes it essential to bring the dialogue out into the open.

Conclusion

Nurses are key providers of healthcare. Their decisions in the clinical setting are crucial to patient outcomes; therefore, transparency is needed in the detailed care provided to patients. The concept of positive deviance is viable and appears to be occurring in nursing practice. Reporting and subsequent analysis of positive deviance with regard to standard practice guidelines will assist in understanding outcomes of this care and further the nursing profession. Koerner (2009) described nurses as walking between two worlds: the concrete world of a scientist and the abstract world of an artist. A more comprehensive understanding of artistic contributions of nurses who utilize positive deviance in a concretely-defined world would lead to the development and implementation of strategies to support nurses in their clinical decision- making and

practice as well as lead to the investigation of patient outcomes resulting from positive deviance.

As nurses merge into more autonomous roles of providers of primary health care services in a redesigned health system, the concept of positive deviance should become a goal rather than a dilemma; patient care and patient outcomes will benefit when nurses gain the confidence and courage to make intentional and honorable decisions to provide innovate, creative, and adaptive care in spite of established norms and regardless of personal risk.

Table 1 Literature table for concept analysis of positive deviance

Article	Context	Terms
Abrahamson et al. (2010)	Healthcare management Approach to organizational change	• Positive deviance • Innovative practice
Appelbaum, Iaconi, & Matousek (2007)	Organizational behavior Workplace behavior	• Positive deviance • Intentional behaviors that depart from norms in an honorable way • Pro-social behavior • Utilizes creativity and innovation • Departure from organizational accepted norms • Development of new ideas not held by the majority • Requires risk • Often makes others uncomfortable
Benner (2005)	Critical care nursing Behavior	• Experiential learning • Intentional reasoning
Berner, Ives, & Astin (2004)	Critical care nursing Behavior	• Rule breaking • Practice beyond legal boundaries • Decisions beyond legal limits • Breaking guidelines
Bloch (2001)	Management Personal characteristic	• Positive deviants • Focused, persistent, and optimistic • Different • Trail blazers Look for innovative solutions • Initiative • Strong achievement focus • 'unfettered by the need to conform' • People who can make things happen
Bradley et al. (2009)	Healthcare management Approach to improve quality	• Positive deviance • Innovative strategies • Alternative method to identify best practices
Clancy (2010)	Nursing administration Personal characteristic	• Positive deviants • Creative minds • always find a way to get the job done • extremely resourceful, knowledgeable, and adaptable • 'diamonds in the rough' • Alterations • rogues • 'under the radar' • 'going outside the hospital's usual process' • Achieve success despite the rules and regulations through workarounds

Table 1 (Continued)

Article	Context	Terms
Dehler & Welsh (1998)	Sociology Behavior	• Constructive deviance (creative individualism, productive nonconformists, and opinion deviant) • Conform selectively • Individuals add value to organizations by making judgments about the appropriateness of organizational norms and rules in work performance • Adaptive • Intentional judgments • Illegitimate means or methods not sanctioned by the organization to accomplish their goals • Rebelling • Response to conflicting role expectations • Differ from something • Important source of adaptive capacity in organizational transformation • Divergent thinking • Flexible
Dodge (1985)	Sociology Behavior	• Claims to have coined the phrase "positive deviance" • Departure from norms • Normative flexibility
Eslom, Happell, & Manias (2009)	Mental health nursing Behavior	• Informal role expansion • Practice beyond traditional scope of nursing • Transgressing professional and legal boundaries
Estabrooks et al. (2005)	Nursing Knowledge	• Experiential knowledge • Occasional rejection of advice from clinical nurse specialists, educators, and physicians
Fielding, Hogg & Annandale (2006)	Sociology Personal characteristic	• Positive deviants • Extreme group members • High achieving
Goode (1991)	Sociology Behavior	• Not a viable term • Depart from normal expectations
Gordon (2005)	Nursing Behavior	• Nurses learn to quietly work the system in getting things done for their patients
Hartman, Wilson, & Arnold (2005)	Ethics Entrepreneurial environment Behavior	• Positive ethical deviancy • Moral imagination • Deviation from baseline

Table 1 (Continued)

Article	Context	Terms
Hutchinson (1990)	Nursing Behavior	• Responsible subversion • Rule-bending • Intentional • Invisible practice • Role disillusionment • Role discrepancy • Cognitive dissonance • Behaviors outside commonly accepted norms • How work gets done in spite of or in opposition to formal systems • Violation of hospital policies or medical orders • Complex process that requires energy and effort • Occurs in response to a conflict between systems or people • Flexible
Koerner (2009)	Decision-making Nursing	• Intention
Kim, Heerey & Kols (2008)	Nursing Inquiry method	• Positive deviance • Different from the rest of the group • Solutions from within a community
Kramer & Schmalenberg (2008)	Critical care nursing Focus on autonomy Behavior	• Autonomy as blurring of lines • Negotiating the scope of practice • Freedom to act on what is in the best interest of the patient • Redefining domain boundaries • Shifting limits on action • Knowledge and responsibility to meet patient needs • Performance of skills beyond professional jurisdiction • Role enlargement or expansion • Situational credentialing • Renegotiation of scope of practice • Sometimes a protocol does not fit a the patient, time or context
Lindberg & Clancy (2010)	Nursing administration Behavioral change process	• Positive deviance • "Unusual suspects" who practice differently and more effectively
Lloyd (2011)	Healthcare Purchasing Problem-solving behavior	• Positive deviance • People who figure out solutions to problems without requiring special resources • Uncommon practices/behaviors
Luft (2010)	Health Services Research Personal characteristic	• Positive deviants • "good" statistical outliers

Table 1 (Continued)

Article	Context	Terms
Marra et al. (2010)	Infection Control Compliance strategy	• Positive deviance
Marsh et al. (2004)	Medicine Approach to change	• Positive deviance • Different
McCall (1993)	Army nursing Behavior	• Modifications • work around • innovations • creativity • different practice • adaptations • 'found ways to get the job done no matter what'
Melnyk & Davidson (2009)	Nursing Administration Culture	• cultures that positively deviate • innovative • knowledge workers rather than task-driven care providers
Milton (2006)	Nursing ethics Behavior	• rule breaking
Nowakoski (2007)	Management Behavior	• constructive deviance
Pascale & Sternin (2005)	Business Process/approach to change	• Positive deviants/deviance • Prevail against the odds • 'some problems can be solved only by those in the trenches' • Change agents • Different • Alternative reality • Internally developed solutions

Table 1 (Continued)

Article	Context	Terms
Pascale, Sternin & Sternin (2010)	Business Counterintuitive approach to change	• Positive deviants/deviance • Unique way • Uncommon practice • Overcome • See solutions where others don't • Key to spreading and sustaining needed change • Innovative behaviors • Countercultural happenings • Outliers who succeed against all odds • Observable exceptions • Works like nature works • Statistical outliers • Outperform the norm • Divergence from the norm • Different • Act of courage • Involves risk • Bottom-up process • Focus on what is going right • Innovations • Creativity • Malleable • Challenging well-established norms • Out of the box • Grassroots
Polet, Vanderhaegen & Amalberti (2003).	Safety science Behavior	• Systemic migration of boundaries • Violations are normal part of work • Offer 'boarder line tolerated conditions of use' as usual level of performance that lies outside of established practice
Robinson & Bennett (1995)	Management Behavior	• Deviant workplace behavior • Voluntary • Violates significant organizational norms • Threatens organization and members or both
Rycroft-Malone et al. (2008)	Nursing Care approaches	• Autonomous practice • Extension of practice • Extension roles • Developing skills beyond the traditional scope of practice
Seidman & McCauley (2008)	Business Personal characteristic	• Positive deviants • Unconsciously competent • Slightly alter work as needed • Passionate commitment to the effort • Highly focused
Spenceley, Reutter & Allen (2006)	Nursing Behavior	• Patient advocacy is best done under the radar

Table 1 (Continued)

Article	Context	Terms
Spreitzer & Sonenshein (2004)	Business Behavior	• Extends deviance to positive behaviors • Norm-departing behaviors • Intentional behaviors that depart from norms in an honorable way • Extreme cases of excellence • Break free of the constraints of norms to conduct honorable behaviors • Related to but distinct from organizational citizenship behaviors • Related to but distinct from whistle-blowing • Related to but distinct from corporate social responsibility • Related to but distinct from creativity and innovation
Stewart, Stanfield & Tapp (2004)	Nursing Behavior Focus on autonomy in nursing	• Autonomy • 'going in the back door' scenarios when barriers to care are encountered • Creative ways to accomplish patient goals • Knowledge of how to get things done on behalf of their patients • Decisions regarding limits of nursing scope of practice • Covert rules and expectations at play in the stretching the limits of scope of practice • Expanding or extending scope of practice • Contravening hospital polices and professional association guidelines
Tarantino (2005)	Medicine Tool for change	• Positive deviance • Pre-existing solutions to problems
Vardi & Wiener (1996)	Organization science Behavior	• Organizational misbehavior • Intentional actions that defy and violate norms and expectations
Warren (2003)	Management Approach/Behavior	• Positive deviance • Constructive deviance (creativity, pro-social behavior, and organizational citizenship behavior) • Beneficial deviant behavior (dissent, tempered radicalism, whistle-blowing, functional disobedience, and exercising voice) • Job autonomy • Overcome social norms • Resist social pressures to conform • Protest/challenge organizational status quo • Break or depart from reference group norms and are socially or organizationally beneficial
Yonge & Molzahn (2002)	Nursing Behavior	• Exceptional nontraditional caring practices • Beyond scope of practice

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Chapter 3: The Wicked Question Answered: The Use of Positive Deviance to Deliver Patient-Centered Care

Abstract

Background: There is the perception that nurses use positive deviance, an overt act of deviation from standard protocols or rules with the intent to improve outcomes, in order to provide patient- centered care when standard practice guidelines are lacking. How nurses respond when faced with the dilemma of providing patient-centered care in the absence of patient-centered practice guidelines remains relatively unreported.

Purpose: This is a report of a three round online Delphi study of the care provided by experienced critical care nurses when guidelines were lacking (November 2011 – February 2012). The purpose was to understand nursing care when standard practice guidelines did not meet patient specific care needs and to develop various viewpoints related to the use of positive deviance in providing patient-centered care.

Methods: Complexity theory and the framework of a wicked question were used to guide the descriptive survey research. Participants included 106 experienced critical care nurses working full-time caring for adult patients from the American Association of Critical Care Nurses (AACN). Delphi round one was a request through an electronic newsletter inviting participation in a survey on providing care when guidelines are lacking. Content analysis was used to develop the examples provided into statements for rounds two and three. In round two, participants rated the statements on two scales (reasonability/appropriateness and acceptability). Mode(s) and percentages were added to

the survey for round three and participants rated the statements again and provided additional comments.

Results: There were 67 unique statements in 8 themes. Nurses agreed that deviations were needed, but the best way to deviate was not apparent. Statements were further reduced to four dominant themes of positive deviance: care during emergent situations; end-of-life care; communication and decision-making; and visitation. There is also alignment with the proposed model of positive deviance within complexity science.

Conclusion: Results support the presence of positive deviance and expose care provided by nurses when standard practice guidelines do not match the patient care needs. These results reflect recent issues and recommendations for critical care research. The four dominant themes of positive deviance are recommended as priorities for evidence based research and practice guidelines.

Key Words: *positive deviance; Delphi; patient-centered care; complexity theory; critical care nurses*

Manuscript

How nurses respond when faced with the dilemma of wanting to provide patient-centered care in the absence of patient-centered practice guidelines remains relatively unreported. Of interest is the patient care provided by critical care nurses when faced with ill- fitting practice guidelines. Specific decision-making situations in the clinical setting contain multiple conditions of certainty, uncertainty, and risk (Huber, 2010). Standards may not be available to guide nurses or may not be realistic for implementation at the point of care. Nurses may be forced to react creatively to meet the needs of their patients.

Conceptualization and Significance

Berner, Ives, and Astin (2004) found that 92.2% of surveyed nurses were aware of legal limits when they made decisions in relation to patient care and yet 70% of the sample report making decisions beyond these limits. Nurses are key providers of health care. The work of nurses is more than simply the application of clinical knowledge and skills as patient safety and quality depends on critical decisions about the prioritization and organization of care delivered in a complex health care system (Ebright, 2010).

Transparency is needed concerning care provided to patients. It has already been noted that there is a practice dilemma when standard practice guidelines do not fit the needs of a specific patient care situation (Berner, Ives & Astin, 2004; Clancy, 2009; Estabrooks et al., 2005; Hutchinson, 1990; Kramer & Schmalenberg, 2008; Milton, 2006; Rycroft-Malone et al., 2008; Stewart, Stansfield & Tapp, 2004; Yonge & Molzahn, 2002). Conflict exists when standard practice guidelines "prohibit nurses from doing what they believe is in the patient's best interest" (Hutchinson, 1990, p. 7). Evaluating

nursing judgment and decision making at the point of care is multifaceted, and the evaluation of the processes used by nurses to make decisions is not well understood (Dowding &Thompson, 2003).

Review of Literature

Kramer and Schmalenberg (2008) identified a conundrum in the context of protocol-driven nursing practice when they noted: "Sometimes a protocol does not fit this particular patient, at this particular time, in this particular context" (p. 68). One of the reasons that nurses are faced with practice dilemmas is based in their limited autonomy and control in the practice realm where "Unlike administrators and physicians, who can essentially create rules, nurses do their work of patient care within a context of rules imposed by others" (Hutchinson, 1990, p.7). A conflict exists when the accepted rules in a given situation "prohibit nurses from doing what they believe is in the patient's best interest" (Hutchinson, 1990, p. 7). Berner, Ives, and Astin (2004) noted that healthcare organization have policies, procedures, and protocols in place to guide practice, but found that nurses "sometimes practice beyond their legal boundaries to ensure that patients are safe" (p. 125).There are varying scenarios from literature describing nurses who intentionally provide care beyond the scope of their practice (Kramer & Schmalenberg, 2008; Rycroft-Malone et al, 2008; Stewart, Stansfield & Tapp, 2004; Yonge & Molzahn, 2002).

Patients' needs are motivating factors for nurses to adapt standard care guidelines to: save a life; insure a safe environment, prevent harm or complications; deliver effective and efficient patient care; promote quality of life or quality of death; and provide holistic patient care (Kramer & Schmalenburg, 2008). "Everyday ethical and clinical

comportment are guided, not so much by quandary and extreme cases that fall outside of the boundaries of good practice, but by usual understandings about worthy competing goods in particular clinical encounters" (Benner, 2005,p. 154).

Nurses find creative ways to accomplish patient care through adaptations, work-arounds, modifications, and innovations that are different from standard practice guidelines (Abrahamson et al., 2010; Benner, 2005; Bradley, et al., 2009; Clancy, 2010; Kim, Heerey & Kols, 2008; Lindberg & Clancy, 2010; Luft, 2010; McCall, 1993; Melnyk & Davidson, 2009; Pascale, Sternin & Sternin, 2010; Stewart, Stanfield & Tapp, 2004). Nurses provide care in methods described as 'under the radar' or 'around the system' (Gordon, 2005; Spenceley, Reutter & Allen, 2006). Nurses bend or break rules, such as policies, orders, or the State Nurse Practice Act, to positively affect patient care (Berner, Ives & Austin, 2004; Estabrooks et al., 2005; Hutchinson, 1990; Milton, 2006). The gap in the literature relates to the lack of understanding and the lack of descriptions of the care nurses provide in these situations. It is suggested that nurses utilize positive deviance in order to provide patient-centered care.

Positive deviants do not openly report their deviations as they are often "under the radar" of management unless or until further investigation occurs (Clancy, 2010). In discussion about lessons learned from Army nurses during time of war, McCall (1993), found instances of nurses working around what they considered "foolish" orders instead of challenging them. Gordon (2005) points out that a majority of nurses in the United States do not belong to unions and are employed "at will" with little legal protection when they speak out, as individuals, about working conditions or patient care.

Consequences of positive deviance are that standard practice guidelines are broken, but patient-centered care is provided and new nursing knowledge can be generated if the care provided by nurses in these situations is better understood. If reporting of positively deviant behavior could occur, then nurses could view nursing practice as "not merely carrying out an interiorized theory", but as a "dynamic dialog in which new understandings of theories may be created" where "the expert is frequently called upon in novel, puzzling, or breakdown situations" (Benner, 2005, p. 154-5). This idea is consistent with the premise that quality measures should be outcome-focused rather than process-focused (Luft, 2010).

The presence and nature of positive deviance is unknown and under-reported. This leads to false support for ineffective or insufficient protocols and policies that nurses may already be circumventing. Due to lack of details on how critical care nurses provide care in situations when standard practice guidelines do not meet patient specific care needs, this study was implemented.

Purpose of the Study

Professional standards are used to guide patient care and serve as foundations for best practices. There is a need to comprehend the care delivered by nurses when standard practice guidelines do not match patient specific needs. Nurses must balance their decisions for patient care between what evidence-based practice dictates, what is mandated by law, and what the situation demands (Lewenson & Truglio-Londrigan, 2008). The care delivered by nurses must be reported in order to have accurate health outcome data. This study aimed to explore the care provided by nurses in a variety of situations where standard practice guidelines did not fit the needs of a specific care

situation and to develop various viewpoints related to the use of positive deviance to provide patient-centered care.

Theoretical Framework

Complexity science views a system such as healthcare as one in which numerous independent elements continuously interact and spontaneously organize and reorganize themselves into more and more elaborate structures over time (Wilson, 2009). Once it is determined that standard practice guidelines are lacking the essentials necessary to deliver safe patient centered care, reorganization must occur. This warrants exploration of the selected reorganization in the form of a wicked question. In complexity science, the wicked question is used as a method of inquiry to reframe the understanding of a system to broaden and deepen the scope of what are described as dynamic, massively entangled, emergent, and robust complex adaptive systems, such as healthcare systems (Begun, Zimmerman, & Dooley, 2003). Wicked questions are developed to expose the assumptions that outline actions and choices. Wicked questions articulate the embedded and often contradictory assumptions held about a topic (Zimmerman, Lindberg, & Plsek, 1998). Zimmerman (2000) terms a question as 'wicked' if there is an embedded paradox or tension in the question.

Complexity Science

The study was viewed through the lens of complexity science. This framework is useful for examining the complex, adaptive, and self-organizing system for health care delivery (Fairchild, 2010; Wilson, 2009). Complexity science offers a compatible approach for understanding adaptations that occur in the ever changing environment of nursing work and meshes well with the holistic care concept prevalent in the science of

nursing (Ebright, 2010). Complexity science suggests that the whole is not the sum of the parts. The outcome of a situation cannot always be explained by studying the individual elements. This view fits with the unpredictable, disorderly, and unstable aspects of the health care system in which critical care nurses provide patient care.

The nursing profession embodies the four characteristics of complexity in human organizational systems. (a) Nurses work across interdisciplinary departments with many other health care providers, as well as with patients and families. (b) Nurses are required concurrently to perform multiple and varied tasks. (c) Nurses make clinical judgments, perform clinical interventions, and manage written and/or electronic communications and record keeping. (d) The work of nursing occurs in the fast-paced, uncertain health care environments with a goal to provide high quality, safe patient care (Fairchild, 2010).

Complexity science suggests that attempts at rigid control of these complex systems increase problems and unintended consequences requiring individuals to work around or deviate from controls that are not flexible enough to allow for individual or circumstantial differences (Matlow, Wright, Zimmerman, Thomson, & Valente, 2006). Attempts to understand the need for and implications of deviation from system controls are encompassed in asking the "wicked question".

Wicked Question

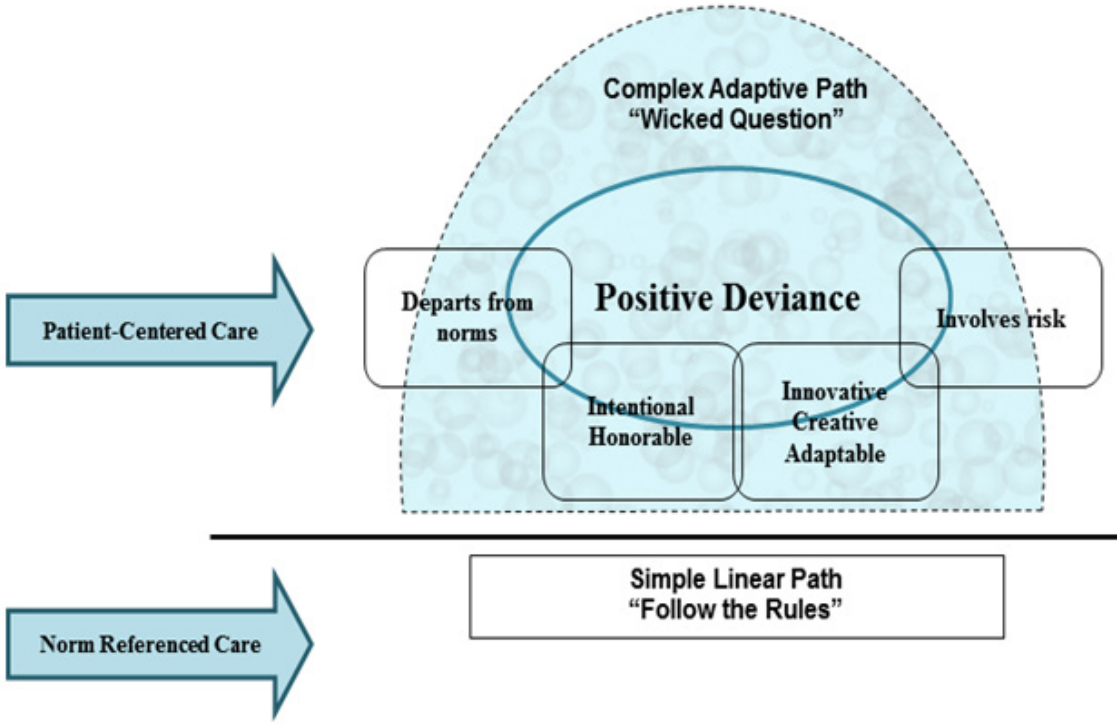
The inquiry framework of a wicked question promotes deeper insights into complex issues, structures, processes, and patterns that underlie current approaches rather than remedying problems with increased standardization such as more policies, procedures, and protocols (Matlow et al., 2006). The value of asking wicked questions lies in their capacity to bring to the surface the fundamental issues that need to be

addressed in making the 'undiscussable' discussable (Zimmerman, 2000). Matlow et al. (2006) suggests that by understanding the nature of a relationship in the delivery of patient care, the process could be individualized instead of creating new protocols.

It is proposed that nurses are not reporting, or are unable to report due to system constraints, the exact care they are providing; and therefore, there is no outcome data on positive deviance that occurs in the nursing practice environment. This ironically leads to false support for ineffective or insufficient protocols and policies that the positive deviant nurses continue to be forced to manage. It may be difficult to uncover positive deviance in nursing as nurses may be seen, or may perceive themselves, as working against standard nursing practices.

"The hospital environment is highly regulated by both internal and external agencies…many policies, procedures, protocols exist, with performance outcomes regularly reported to regulatory bodies" (Clancy, 2009, p. 507). Pascale and Sternin (2005) acknowledge that uncovering positive deviants is uncomfortable as they may fear being exposed or ridiculed, and few hospitals want to tackle the predictive indicators of malpractice because doing so might be misconstrued as having foreknowledge. "Only when people feel safe enough to discuss a taboo and when the community is sufficiently invested in finding solutions can the prospect on an alternative reality appear" (Pascale & Sternin, 2005, p. 77). The wicked question investigated was how do experienced critical care nurses use positive deviance to provide patient-centered care?

Figure 1 Model of Positive Deviance within Complexity Science



Positive Deviance

Concepts from complexity science can be applied to real-world dilemmas faced by critical care nurses through the application of positive deviance. The implication of a normative description of positive deviance is that it is an evaluative term that identifies conduct that ought or ought not to occur. From concept analysis, positive deviance in nursing as depicted in Figure 1 is intentional and honorable behavior which departs or differs from an established norm and which contains elements of innovation, creativity,

and/or adaptability; it also involves risk for the nurse (Gary, 2011). Positive deviance is proposed to provide a basis for decision-making when the defined normal actions expected of the nurse collide with the nurse's view of the right thing to do for the patient.

Patient-Centered Care

A principled nurse is not a conformist, but questions rules that do not serve human values; in this higher form of purpose, breaking a rule for the sake of the patient is viewed by nurses as a form of advocacy (Hutchinson, 1990). Advocacy for patients will always carry a potential for conflict (Yonge & Molzahn, 2002). Patient-centered care puts the focus of health care on the patient. The IOM lists patient-centeredness among the six proposed quality aims by which health care systems should measure outcomes (IOM, 2001) and as one of the five core competencies of health professionals (IOM, 2003). The IOM defines patient-centered care as care that focuses on the patient rather than the disease or the clinician (2003). Patient-centered care is also defined as "the extent to which health care providers, such as nurses, select and deliver interventions or treatments that are respectful of and responsive to the characteristics, needs, and values of individual patients" (Poochikian-Sarkissian, Wennberg, & Sidani, 2008, p.14). This focus on the care recipient implies that nurses assess individual patient needs and select care interventions that are consistent and responsive to the needs of the patient.

Research Question

A single question guided this Delphi study. How do critical care nurses use positive deviance to deliver patient-centered care?

Methods

Research Design

This study employed an online survey to conduct a three-round policy Delphi technique. This methodology allowed interaction between members of a diverse panel of critical care nurses who may have faced a situation when standard practice guidelines did not meet patient specific care needs. The study was quasi-anonymous as anonymity was assured between participants but not between the individual participant and researcher (McKenna, 1994).

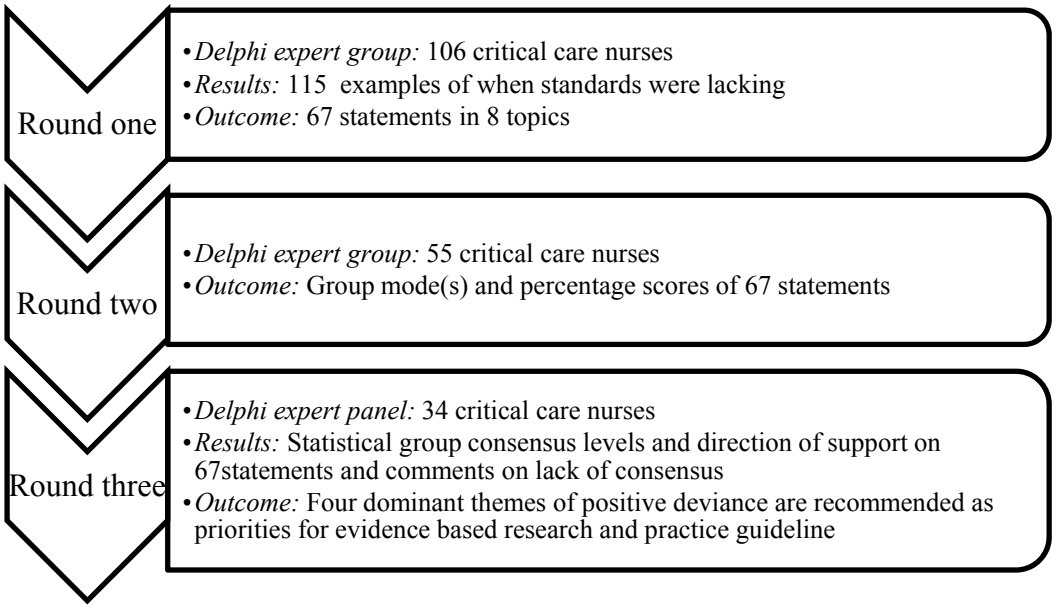
The Delphi technique was an appropriate design choice for this study for five reasons. (a) The problem did not lend itself to precise analysis, such as through direct observation, but benefited from a collection of subjective judgments. (b) Input was desired from more individuals than could effectively interact in a face-to-face exchange. (c) Time and cost would have made frequent group meetings infeasible. (d) Anonymity needed to be assured due to the risk nature of the problem. (e) Validity of the results required heterogeneity of the participants and provided protection from domination by quantity or by strength of personality (Waltz, Strickland, & Lenz, 2010).

The policy Delphi method allowed participants to contribute elements to improve understanding of a complex problem with the intention of building a composite model of the situation under study, but not necessarily consensus (Linstone & Turoff, 2002). The point was to explore both consensus and disagreement surrounding nursing care provided when standard practice guidelines did not fit the needs of a specific patient care situation. The study followed the broad design guidelines of Turnoff (1975) incorporating lessons

learned from Keeney, Hassen, and McKenna (2006) as well as previous policy Delphi studies conducted by de Loë (1995) and O'Loughlin and Kelly (2004).

The three-round policy Delphi used in this study during November 2011 to February 2012 is outlined in Figure 2. A detailed timeline in Appendix A is provided for further clarification.

Figure 2 Flowchart of the Delphi process



Participants

There is no agreement for the panel size in a Delphi study, and the use of a large panel is discouraged due to difficulties in handling large volumes of qualitative data generated from the first round survey (Day & Bobeva, 2005; Keeney et al., 2006; Linstone & Turoff , 2002; de Loe,1995; Turoff, 1975). The Delphi group size does not depend on statistical power, but on group dynamics for arriving at results (Okoli & Pawloski, 2004). The panel for this study aimed to include licensed critical care nurses

who had five or more years of bedside critical care experience and were working full-time caring for adults in a critical care setting; therefore, demographic purposive sampling was used.

Data Collection

Pilot test. The first round questionnaire, the study instructions and background information, were piloted to a convenient group of 3 nurses (who met the expert panel criterion). These documents were revised based on slight wording modifications recommended from the pilot group to increase clarity.

Delphi round one. In November 2011, a panel of experienced critical care nurses was accessed through invitation posted in *Critical Care Newsline*, an electronic newsletter from the American Association of Critical-Care Nurses (AACN). The questionnaire for round one was comprised of two sections: the first section sought demographic details and the second section consisted of one open-ended question. The open-ended question asked participants to consider times when a standard practice guideline did not match patient specific needs and give an example of the care delivered for the sake of the patient that was not totally in line with the standard practice guidelines, protocols, or instructions in effect at the time care was delivered. Seventy-seven participants generated 115 individual care statements in response to the open-ended question as some participants provided more than one example. These were content analyzed and topics were grouped into themes. A total of 67 statements were generated encompassing 8 thematic categories in critical care: specific care examples, common practice issues with labs, blood administration, comfort measures, fluid boluses,

medication administration, visitation, and general statements about nursing practice. The statements were included in the surveys used for rounds two and three.

Delphi round two. The second survey consisted of the 67 statements derived from round 1. The participants who provided emails were asked to judge the statements using two four-point Likert scales. The first scale referred to the reasonability or appropriateness of the care and the second scale referred to the agreement with the statement (see Figure 3). Rather than force participants to either support or oppose statements, a "no judgment" option was offered. This reduced the occurrence of statements that did not clarify the issue and omitted a 'fence-sitting' option (O'Loughlin & Kelly, 2004; de Loë, 1995; Turoff, 1975).

Figure 3 Example of Judgment Scales as presented to participants in round two

Is the care appropriate?	❍ definitely inappropriate	❍ inappropriate	❍ appropriate	❍ very appropriate	❍ no judgment
Do you agree with the care?	❍ strongly disagree	❍ disagree	❍ agree	❍ strongly agree	❍ no judgment

Delphi round three. The last survey contained the same statements as round two, but included the group mode(s) and percentages summarized from round two for each statement. Each participant was reminded of their individual round two rating using embedded data linked to their email address. Participants were asked to re-rate each statement in light of the group rating. If a participant disagreed with the group mode and/or chose to change a rating they identified during round two, they were prompted to provide an explanation. The analysis of round three data involved defining the level and direction of consensus and content analysis of the explanations provided by participants.

An additional question in round three asked for participants to provide an open-ended response to: Are there any current standard practices that you feel need to be changed for the sake of patient care? Content analysis was used to summarize responses to the final question.

Statistical Analysis

This study was not intended to produce statistically meaningful results. Through an iterative process, the policy Delphi provided feedback to panelists so that they could reflect on their responses in light of the overall group response. Both quantitative and qualitative elements were combined. Descriptive statistics (mean, standard deviation, and frequencies) were used to analyze the demographics from round one. Rounds two and three involved the analysis of quantitative data modeled after those used by de Loë (1995) and O'Loughlin and Kelly (2004) for defining the level of consensus and the direction of the consensus. Pre-defined levels of consensus (the degree to which the group is able to agree on support) adapted from de Loë (1995) are defined in Table 2. Measures of central tendency, standard deviation, and variance were calculated for each statement. The "no-judgment" selections were removed from the statistical analysis, but these responses were considered when evaluating the results of the analysis.

Direction of consensus, either in favor or not in favor of the statement, depended on which rating influenced the consensus. Contiguous agreement categories were used to determine the direction of support. A lack of consensus was considered non-directional and ambiguous and labeled as none. In evaluation of whether the group's ratings were polarized, the variance of each distribution was used. Polarity definitions as used by de Loë (1995) provided a basis for identifying the rating polarity as strong if it was ≥ 1.5;

weak if it was between 1.2 and 1.5, and none if it was < 1.2 (de Loë, 1995). Ordinal data from the rating scales were treated as interval data in order to calculate the variance and to provide a more precise measure of polarity (de Loë, 1995). The analysis of polarity provided little information for the statement analysis as only one statement in round two contained a weak polarity that was absent in the same statement for round three. Ultimately, the data from this study was best analyzed by classifying each set of ratings according to consensus levels (low, moderate, high, or none) and direction of support in order to answer the questions of whether the group supported, opposed, or was ambivalent towards a statement. Data were analyzed using the Statistical Package for Social Sciences (SPSS Version 17, Chicago, IL, USA).

Table 2 Definitions of levels of consensus

Consensus level	Definition of consensus
High	70% of the ratings in one agreement category or 80% in two contiguous categories
Moderate	60% of the ratings in one agreement category or 70% in two contiguous categories
Low	50% of the ratings in one agreement category or 60% in two contiguous categories
None	Less than 50% of the ratings in one agreement category or less than 60% of ratings in two contiguous categories

Ethical Considerations

Approval to conduct this study was granted from The University of Texas at Tyler Institutional Review Board (Appendix B). Potential participants were linked to Qualtrics™ where the study purpose, inclusion criteria, and informed consent were explained (Appendix C). Consent was assumed if the participant completed the survey. Subsequent surveys links were sent to the emails provided by participants in round one

through Qualtrics™ and began with a repeat of information concerning the study, contact information, and assumption of consent by completion of the survey (Appendix E and F).

Qualtrics™ is a private research company with software that enabled the creation of custom Web-based surveys for self-administration by participants. The online Qualtrics™ site was used to build the three rounds of survey questionnaires, record and store the completed responses as they were submitted, and complete basic statistical analysis. The Qualtrics™ site is protected by a login name and password.

Results

Response Rate and Panel Characteristics

There were 106 nurses from the AACN who met the inclusion criteria in round one, of which 102 provided an email address to receive subsequent surveys. 73% (77/106) provided a written response to the open-ended question soliciting information about the care provided in situations in which a standard practice guideline either did not fit or was lacking to meet the needs of their patient or the needs of the clinical situation. This group is of particular interest as their responses formulated the statements for the subsequent surveys. Response rates of 54% (55/102) and 62% (34/55) were received for rounds two and three respectively. The attrition rate over the three Delphi rounds was 68% (34/106).

93% (99/106) of the qualifying participants affirmed that at some time in their nursing care they deviated from standard practice guidelines for the sake of a patient. The majority of participants were Caucasian females with a mean age between 46 and 47 years of age with the average length of critical care experience between 18 and 19 years. The majority of participants worked as bedside staff nurses (74%) in conjunction with

other positions. The clinical practice settings represented a variety of specialty critical care units selected in combination with self-reported areas pertaining to trauma, burns, long term acute care, progressive care, cardiac catheterization, oncology, emergency department, and critical care transport. The demographic characteristics for participants in all three rounds are presented in Table 3.

A variety of specialty certifications were listed in open-response format, but 90% (71/79) of those who provided a text response identified the CCRN. Thirty-four states are represented, with the highest representation from Texas. There were 55 panelists who completed the round two survey and 50 of the 55 were from the group of 77 nurses from round one who participated in statement generation. Of the 34 panelists who completed the last survey, 32 of the 34 were from the group of 77 nurses from round one who participated in statement generation.

Table 3 Characteristics of study participants

	R 1 ***n* = 106 (100%)**	**R1 participants who generated statements** ***n* = 77 (73%)**	**R 2** ***n*=55 (52%)**	**R 3** ***n*=34 (32%)**
Female	90% (95/105)	92% (71/77)	91% (50/55)	88% (30/34)
Age in years: range and mean	27-65(46) *n*=105	29-65 (46)	29-65(47)	29-62(47)
Caucasian	92% (97/105)	91% (70/77)	96% (53/55)	100% (34/34)
Years working as a nurse: range and mean	5-44 (20) *n*=105	5-44(21) *n*=76	5-44 (22) *n*=54	5-42 (22)
Years of experience in critical care: range and mean	5-41(18)	5-41(18)	5-41(19)	5-39 (19)
Highest Nursing Degree Held				
Diploma	4% (4/106)	4% (3/77)	2% (1/55)	3% (1/34)
Associate Degree	23% (24/106)	22% (17/77)	16% (9/55)	15% (5/34)
Bachelors Degree	50% (53/106)	51% (39/77)	51% (28/55)	56% (19/34)
Masters Degree	22% (23/106)	21% (16/77)	29% (16/55)	24% (8/34)
Doctoral Degree	2% (2/106)	3% (2/77)	2% (1/55)	3% (1/34)
Trauma Designation Level				
Level I	26% (28/106)	25% (19/77)	20% (11/55)	21% (7/34)
Level II	25% (27/106)	25% (19/77)	20% (11/55)	15% (5/34)
Level III	12% (13/106)	12% (9/77)	11% (6/55)	9% (3/34)
Level IV	5% (5/106)	5% (4/77)	5% (3/55)	3% (1/34)
No Designation	21% (22/106)	22% (17/77)	31% (17/55)	32% (11/34)
Unsure of Level	10% (11/106)	12% (9/77)	13% (7/55)	21% (7/34)
Clinical Practice Unit				
Intensive Care and/or Coronary Care	60	38	27	15
Medical and/or Surgical Intensive Care	43	26	21	12
Neurological/Neurosurgical Intensive Care	20	14	12	7
Cardiovascular-Surgical Intensive Care or Coronary Care	31	19	14	4
Current Position				
Bedside Staff Nurse	73% (77/106)	73% (56/77)	69% (38/55)	79% (27/34)
Charge Nurse	30	24	14	11
Staff Educator	13	13	7	4
Manager, Administrator, or Director	14	10	7	2
Clinical nurse specialist or Nurse Practitioner	15	11	11	5
Flight nurse	2	-	-	-

Round One

In round one, 115 examples related to care provided in situations in which a standard practice guideline either did not fit or was lacking to meet the needs of their patient or the needs of the clinical situation were described in response to the open-ended question. Using content analysis, the statements were organized and grouped into themes. For example, there were multiple statements describing the administration of fluid boluses and/or volume expanders without specific orders due to multiple patient

assessment criteria; these where represented under the theme relating to fluid administration and were represented with one statement for participant judgment. Several situations were deemed too specific to break into separate groups, and hence the theme of specific care instances was utilized. The theme relating to medication administration encompassed multiple statements related to the changing of medication orders, initiation of medications, insulin administration, and the bypassing of electronic medication administration systems. Content analysis reduced the list of 115 care examples to 67 statements in 8 themes. The full list is presented in Table 4 along with the consensus levels and direction of support from rounds two and three.

Table 4 Themes and statements with appropriateness and agreeability scores from rounds two and three

	Appropriateness/Reasonability Scale DI=Definitely Inappropriate, DU= Definitely Unreasonable; I=Inappropriate, U=Unreasonable; A=Appropriate, R=Reasonable; VA=Very Appropriate, VR=Very Reasonable				**Agreeability Scale** SD=Strongly Disagree; D=Disagree ; A=Agree; SA=Strongly Agree			
	Consensus		Direction		Consensus		Direction	
Themes and statements	R2	R3	R2	R3	R2	R3	R2	R3
Specific Care Incidences								
1. Using hyperventilation as necessary to keep a patient's intercranial pressure manageable until a physician could arrive.	Low	Moderate	A-VA	A-VA	Low	Moderate	A-SA	A-SA
2. Lowering the head of a patient's bed, despite ventilator bundle protocol to the contrary, during hypotensive episodes.	High	Moderate	A-VA	A-VA	High	Moderate	A-SA	A-SA
3. Advancing a patient's diet beyond what is ordered while monitoring patient's tolerance.	None	Low	None	A	None	None	None	None
4. Writing orders to administer sedatives and pull a femoral sheath on a combative patient scheduled for open heart surgery in the morning, in order to prevent injury, when a physician hung up the phone after stating "do whatever you have to do to make it through the night and do not call me again".	High	High	DI-I	DI-I	High	High	SD-D	SD-D
5. Setting up abdominal pressure monitoring after reading about the procedure on line due to lack of available hospital guidelines or policy due to surgeon's insistence for the monitoring.	Low	High	A-VA	A-VA	Low	High	A-SA	A-SA
6. Rapidly infusing three liters of warmed fluids to a diabetic ketoacidosis patient weighing 70 kilograms with a body temperature of 98 degrees in the absence of a facility policy or protocol.	High	High	I-DI	I-DI	High	High	D-SD	D-SD
7. Not completing the pre-operative checklist prior to sending a patient to the operating room.	High	High	I-DI	I-DI	High	High	D-SD	D-SD
8. Performing bedside abdominal washouts despite a protocol to perform this procedure in the operating room.	High	High	I-DI	I-DI	High	High	D-SD	D-SD

Table 4 (Continued)

		Appropriateness/Reasonability Scale DI=Definitely Inappropriate, DU= Definitely Unreasonable; I=Inappropriate, U=Unreasonable; A=Appropriate, R=Reasonable; VA=Very Appropriate, VR=Very Reasonable				**Agreeability Scale** SD=Strongly Disagree; D=Disagree ; A=Agree; SA=Strongly Agree			
		Consensus		Direction		Consensus		Direction	
Themes and statements		R2	R3	R2	R3	R2	R3	R2	R3
9.	Increasing the FiO2 on a ventilated patient due to patient condition without orders to do so.	High	High	A-VA	A-VA	High	High	A-SA	A-SA
10.	Bagging a patient at a faster than recommended rate during a code situation in order to improve oxygen saturation.	Low	Moderate	I-DA	I-DA	None	Moderate	None	D-SD
11.	Holding the tube feeding on a critically ill patient without orders to hold the feeding.	Moderate	Moderate	A-AV	A-AV	Moderate	Moderate	A-SA	A-SA
12.	Not following standard guidelines during emergent insertion of central lines.	Low	High	I-DI	I-DI	Low	High	D-SD	D-SD
13.	Transferring a patient from critical care that did not meet the physician ordered minimum systolic blood pressure parameters.	High	High	I	I	High	High	D	D
14.	Administering tPA (tissue plasminogen activator) or thrombolytic therapy beyond the accepted window of time.	Moderate	Moderate	I-DI	I-DI	Low	High	D-SD	D-SD
15.	Fashioning a rectal tube using a nasal trumpet and a Foley bag in order to protect the skin of a patient with continuous loose stool.	None	None	None	None	None	Low	None	D-SD
16.	Not discontinuing a Foley catheter, per orders, for an incontinent, obese patient with excoriated skin.	None	Low	None	A	Moderate	High	A-SA	A-SA
17.	Removing a Foley catheter prior to receiving orders.	Low	Moderate	A-VA	A-VA	Low	Moderate	A-SA	A-SA
18.	Sending a patient, who must return the next day for a treatment or procedure, home with IV access due to difficulty and/or patient discomfort with initiating intravenous access.	Moderate	High	I-DI	I-DI	Moderate	Moderate	D-SD	D-SD
19.	Breaking in-line suction to lavage, bag, and suction a ventilated patient in respiratory distress.	Low	Low	A-VA	A-VA	Low	Moderate	A-SA	A-SA
20.	Using saline to lavage an intubated patient in order to stimulate a cough to expel a plug or thick secretions.	None	Moderate	None	A	None	Low	None	A-SA
21.	Suctioning a blood clot out of a mediastinal chest tube to prevent cardiac tamponade.	None	None	None	None	None	Moderate	None	A

Table 4 (Continued)

	Appropriateness/Reasonability Scale DI=Definitely Inappropriate, DU= Definitely Unreasonable; I=Inappropriate, U=Unreasonable; A=Appropriate, R=Reasonable; VA=Very Appropriate, VR=Very Reasonable				**Agreeability Scale** SD=Strongly Disagree; D=Disagree ; A=Agree; SA=Strongly Agree			
	Consensus		Direction		Consensus		Direction	
Themes and statements	R2	R3	R2	R3	R2	R3	R2	R3
22. Not applying ordered SCDs (sequential compression devices) due to patient safety concerns in an ambulatory patient.	None	Moderate	None	A-VA	Low	High	A-SA	A
23. Not maintaining sterile technique when inserting a catheter during an emergency or code situation.	Moderate	High	I-DI	I-DI	Moderate	High	D-SD	D-SD
24. Administering ice chips to a patient on a ventilator.	Moderate	Moderate	I-DI	I-DI	Moderate	Moderate	D-SD	D-SD
25. Turning a hemodynamically unstable patient in order to increase mobility.	Low	Low	I-DI	I-DI	None	Low	None	D
26. Not turning a patient due to lack of hemodynamic stability.	None	High	None	I-DI	Low	High	D-SD	D-SD
27. Assisting a patient to increase mobility prior to a physician order.	High	Moderate	A-VA	A-VA	High	High	A-SA	A-SA
Relating to Laboratory Orders								
28. Waiting to recheck lab values until the next morning, despite an electrolyte protocol requiring more frequent assessment of values.	High	High	I-DI	I-DI	High	High	D-SD	D-SD
29. Ordering labs prior to contacting a physician.	Low	Moderate	A-VA	A-VA	Moderate	High	A-SA	A
30. Using blood glucose readings obtained from a finger-stick interchangeably with serum level glucose readings.	Low	High	A-VA	A	Low	High	A-SA	A
31. Skipping ordered lab draws due to frequency and slow turn-around time between draws for results.	Moderate	Moderate	I-DI	I-DI	Moderate	Moderate	D-SD	D-SD
32. Administering electrolytes above the protocol order due to critically low potassium in a patient experiencing frequent ectopy.	Moderate	High	I-DI	I	Moderate	High	D-SD	D
33. Conserving blood waste samples for return to the patient after drawing labs.	None	Low	None	I	None	Low	None	D
Relating to Blood Administration								
34. Rapidly infusing multiple units of blood products on post open heart patient when the physician does not want to return to surgery.	Low	Low	A-VA	A-VA	Low	Moderate	A-SA	A

Table 4 (Continued)

	Appropriateness/Reasonability Scale DI=Definitely Inappropriate, DU= Definitely Unreasonable; I=Inappropriate, U=Unreasonable; A=Appropriate, R=Reasonable; VA=Very Appropriate, VR=Very Reasonable				**Agreeability Scale** SD=Strongly Disagree; D=Disagree ; A=Agree; SA=Strongly Agree			
	Consensus		Direction		Consensus		Direction	
Themes and statements	R2	R3	R2	R3	R2	R3	R2	R3
35. Administering multiple units of different blood products simultaneously due to massive bleeding.	High	High	A-VA	A-VA	High	High	A-SA	A-SA
36. Not changing the blood tubing per policy when rapidly administering multiple units during an emergency situation.	None	High	None	I	Low	Moderate	A-SA	D
37. Administering blood products via an arterial line when no other access is available.	High	High	I-DI	DI	High	High	D-SD	SD
Relating to Comfort Measures								
38. Withdrawing care on a dying patient who is not receiving adequate pain control.	High	High	I-DI	DI	High	High	D-SD	SD
39. Administering extra doses or clinical boluses of pain medications to a dying patient due to signs or symptoms of suffering.	Moderate	High	A-VA	A-VA	Moderate	High	A-SA	A-SA
40. Administering morphine via nebulizer to a dying patient with severe dyspnea without an order.	High	High	I-DI	I	High	High	D-SD	D
41. Providing water to a dying patient who has NPO orders.	High	High	A-VA	A-VA	High	High	A-SA	A-SA
42. Discontinuing oxygen on a dying patient when “comfort measures” are ordered.	Low	Moderate	I-DI	I-DI	Low	Moderate	D-SD	D-SD
Relating to Fluid Administration								
43. Administering fluid boluses or volume expanders, without current orders, for hypotension, low urine output, and/or tachycardia.	Low	Low	A-VA	A-VA	Low	High	A-SA	A
Relating to Medication Administration								
44. Administering extra doses, above what is ordered, of pain medication for breakthrough pain management.	Moderate	High	I-DI	I	Low	High	D-SD	D
45. Giving a sedative/pain medication bolus or more sedative/pain medication than ordered as needed for patient comfort.	Moderate	High	I-DI	I	Low	High	D-SD	D
46. Administering partial doses of medications due to prior experience with patient response to the ordered dose.	Moderate	High	A-VA	A	Moderate	High	A-SA	A

Table 4 (Continued)

	Appropriateness/Reasonability Scale DI=Definitely Inappropriate, DU= Definitely Unreasonable; I=Inappropriate, U=Unreasonable; A=Appropriate, R=Reasonable; VA=Very Appropriate, VR=Very Reasonable				**Agreeability Scale** SD=Strongly Disagree; D=Disagree ; A=Agree; SA=Strongly Agree			
	Consensus		Direction		Consensus		Direction	
Themes and statements	R2	R3	R2	R3	R2	R3	R2	R3
47. Holding a medication dose when patient's vital signs or lab values are near, but not equal to, the defined parameters ordered for holding the medication.	Low	Moderate	A-VA	A-VA	Moderate	High	A-SA	A
48. Administering more medication than ordered to match the dose the patient normally takes at home.	High	High	I-DI	I	High	High	D-SD	D
49. Bypassing the electronic medication system in order to administer medications in an emergency situation.	High	High	A-VA	A-VA	High	High	A-SA	A-SA
50. Not following the insulin protocol due to prior experience leading to hypoglycemic episodes in patients.	Low	Moderate	I-DI	I-DI	None	High	None	A
51. Adjusting insulin orders due to patient condition or impeding procedures.	Moderate	Low	A-VA	A	Moderate	Low	A-SA	A
52. Initiating and titrating vasoactive medications prior to receiving an order.	None	Low	None	I-DI	Low	Low	A-SA	A-SA
53. Running vasoactive medication drips at higher doses than recommended.	Moderate	High	I-DI	I	Low	High	D-SD	D
Relating to Visitation								
54. Bending visitation policy to accommodate who could visit, how many visitors, and/or for how long.	High	High	A-VA	A-VA	High	High	A-SA	A-SA
55. Limiting visitation hours.	None	Moderate	None	A-VA	None	Moderate	None	A-SA
56. Allowing pet visitation.	High	High	A-VA	A	High	High	A-SA	A
General Nursing Statements								
57. I cannot recall a time when the care I delivered for a patient was not totally in line with standard practice guidelines, protocols, orders or instructions.	Moderate	High	U-DU	U	Moderate	High	D-SD	D
58. Much of my practice is covered by standing protocols.	High	High	R-VR	R	High	High	A-SA	A
59. I always consult a physician for a specific order if there is a question about patient care.	High	High	R-VR	R	High	High	A-SA	A-SA
60. I do not move outside the margins of the scope of practice for nursing.	Low	High	R-VR	R	Low	High	A-SA	A
61. I treat the patient as needed and receive orders at a later time.	Low	Low	R-VR	R	None	Low	None	A

Table 4 (Continued)

	Appropriateness/Reasonability Scale DI=Definitely Inappropriate, DU= Definitely Unreasonable; I=Inappropriate, U=Unreasonable; A=Appropriate, R=Reasonable; VA=Very Appropriate, VR=Very Reasonable				**Agreeability Scale** SD=Strongly Disagree; D=Disagree ; A=Agree; SA=Strongly Agree			
	Consensus		Direction		Consensus		Direction	
Themes and statements	R2	R3	R2	R3	R2	R3	R2	R3
62. I write my own orders to cover what is needed for patient care at the time and inform the physician later.	Moderate	High	U-DU	U-DU	Low	Moderate	D-SD	D-SD
63. I adapt care to the specific situation and/or needs of the patient when no clear guidelines are available.	High	High	R-VR	R	High	High	A-SA	A
64. I step outside the scope of nursing practice.	Low	High	U-DU	U	Low	High	D-SD	D-SD
65. I do whatever is necessary to provide emergent care to a patient when faced with inconsistency or lack of direction.	Moderate	High	R-VR	R	High	High	A-SA	A
66. There are times when I have changed my own practice prior to an accepted change in standard practice.	High	High	R	R	High	High	A-SA	A
67. At times I provide care in situations where there are no clear guidelines or policies in place.	High	High	R-VR	R	High	High	A-SA	A

Round Two

In round two, 23 of the statements (34%) achieved high consensus of agreement for both scales. Appendix G provides detailed results from round two. Modes and percentages were added to the questionnaire for round three as well as a reminder of the individual participant's round two rating using embedded data links.

Round Three

Following round three, the consensus level and direction of support were calculated for each statement. Details are provided in Appendix H for round three, while Table 4 provides the consensus level and direction of support across the second and third rounds. A high level of consensus was achieved across both judgment scales for 35 of the

67 statements (52%). Importantly, this high consensus was retained on 21 of the statements between the second and third rounds, suggesting reliability of the results. Of the highly supported statements in round three, there were 17/35 statements of high consensus in the direction of appropriate/reasonable and agreeable and 18/35 statements in the direction of inappropriate/unreasonable and disagreeable. Based on the averaged mean for the judgment scales, the top 10 statements achieving high consensus for each direction are ranked (see Tables 5 and 6).

Only 41% (14/34) of the round three participants responded to the additional question at the end of the survey: Are there any current standard practices you feel need to be changed for the sake of patient care? The open-ended responses ranged from brief agreement that there are standard practices that need to be changed to some specific recommendations. Some support was offered for the AACN practice alerts and needed practice change with evidence. Specific suggestions pointed to delirium care for elderly patients; ironically, delirium assessment and management was the topic of the February 2012 AACN Practice Alert. Other ideas concerned tube feedings in patients experiencing hypotension, visitation practices, insulin administration, intra-abdominal pressure monitoring, scheduling of medication administration times, an increase in ancillary training and responsibilities, poor physician behavior, and the increased presence of critical care intensivists.

Of the remaining 47 unranked statements, 15 still achieved high consensus; and the remaining 32 contained varying of levels and directions of consensus. Three of the statements reached no consensus on one of the scales by round three. No single statement achieved non-consensus on both scales.

Table 5 Top statements with highest level of agreement

Rank	Statement	Mean R3
1	Administering multiple units of different blood products simultaneously due to massive bleeding.	3.61
2	Bypassing the electronic medication system in order to administer medications in an emergency situation.	3.53
3	Increasing the FiO2 on a ventilated patient due to patient condition without orders to do so.	3.53
4	Bending visitation policy to accommodate who could visit, how many visitors, and/or for how long.	3.49
5	Providing water to a dying patient who has NPO orders.	3.27
6	Administering extra doses or clinical boluses of pain medications to a dying patient due to signs or symptoms of suffering.	3.27
7	I always consult a physician for a specific order if there is a question about patient care.	3.17
8	There are times when I have changed my own practice prior to an accepted change in standard practice.	3.15
9	At times I provide care in situations where there are no clear guidelines or policies in place.	3.15
10	Allowing pet visitation.	3.10

Table 6 Top statements with highest level of disagreement

Rank	Statements	Mean R3
1	Administering blood products via an arterial line when no other access is available.	1.32
2	Administering electrolytes above the protocol order due to critically low potassium in a patient experiencing frequent ectopy.	1.42
3	Performing bedside abdominal washouts despite a protocol to perform this procedure in the operating room.	1.57
4	Writing orders to administer sedatives and pull a femoral sheath on a combative patient scheduled for open heart surgery in the morning, in order to prevent injury, when a physician hung up the phone after stating “do whatever you have to do to make it through the night and do not call me again".	1.57
5	Not completing the pre-operative checklist prior to sending a patient to the operating room.	1.58
6	Giving a sedative/pain medication bolus or more sedative/pain medication than ordered as needed for patient comfort.	1.84
7	Not following standard guidelines during emergent insertion of central lines.	1.86
8	Not turning a patient due to lack of hemodynamic stability.	1.88
9	Withdrawing care on a dying patient who is not receiving adequate pain control.	1.91
10	Waiting to recheck lab values until the next morning, despite an electrolyte protocol requiring more frequent assessment of values.	1.93

Discussion

In judging the general statements about nursing practice, participants agreed that much of their practice is covered by standing protocols, and physicians need to be consulted when there is a question about patient care. They also agreed that they adapted care to the specific situation and/or needs of the patient when no clear guidelines are available. Furthermore, they agreed that they have changed their own practice prior to an accepted change in standard practice as well as providing care in situations where there are no clear guidelines or policies in place.

A close examination of the top 10 statements with high consensus for agreement and the top 10 statements for high consensus disagreement revealed four dominant themes of positive deviance: care during emergent situations, end-of-life care, communication and decision making, and visitation (Table 7). The themes are central to the remaining discussion and should be used to prioritize evidence-based research and development of practice guidelines. These results reflect recent issues and recommendations for critical care research as "the best hope for both improving patient outcomes and containing costs lies in developing innovation treatments and systems of care, implementing new research findings, and identifying critical care research priorities" (Deutschman, Ahrens, Cairns, Sessler, & Parsons, 2012, p. 16).

Table 7 Dominant themes of positive deviance

Theme	Statements with highest level of agreement.	Statements with highest level of disagreement.
Care during emergent situations	1. Administering multiple units of different blood products simultaneously due to massive bleeding. 2. Bypassing the electronic medication system in order to administer medications in an emergency situation. 3. Increasing the FiO2 on a ventilated patient due to patient condition without orders to do so.	1. Administering blood products via an arterial line when no other access is available. 2. Administering electrolytes above the protocol order due to critically low potassium in a patient experiencing frequent ectopy. 3. Performing bedside abdominal washouts despite a protocol to perform this procedure in the operating room. 5. Not completing the pre-operative checklist prior to sending a patient to the operating room. 6. Giving a sedative/pain medication bolus or more sedative/pain medication than ordered as needed for patient comfort. 7. Not following standard guidelines during emergent insertion of central lines. 8. Not turning a patient due to lack of hemodynamic stability.
End-of-life care	5. Providing water to a dying patient who has NPO orders. 6. Administering extra doses or clinical boluses of pain medications to a dying patient due to signs or symptoms of suffering.	9. Withdrawing care on a dying patient who is not receiving adequate pain control.
Communication and decision-making	7. I always consult a physician for a specific order if there is a question about patient care. 8. There are times when I have changed my own practice prior to an accepted change in standard practice. 9. At times I provide care in situations where there are no clear guidelines or policies in place.	4. Writing orders to administer sedatives and pull a femoral sheath on a combative patient scheduled for open heart surgery in the morning, in order to prevent injury, when a physician hung up the phone after stating "do whatever you have to do to make it through the night and do not call me again". 10. Waiting to recheck lab values until the next morning, despite an electrolyte protocol requiring more frequent assessment of values.
Visitation	4. Bending visitation policy to accommodate who could visit, how many visitors, and/or for how long. 10. Allowing pet visitation.	-

Care during emergent situations. A common theme, not just present in the top ranking statements, was the need for violations in standard practices during emergent patient care situations. Example text responses found in round three are: *"You do what you have to do to keep that patient alive"* and *"I agree since I do this all the time but find it not "right" without an order - also know some MDs well enough to know they would cover me if needed."*

Current literature mirrors themes collected from this Delphi study. In the February, 2012 issue of *Critical Care Nurse*, as this study was concluding, an article referencing a need for guidelines on turning and repositioning hemodynamically unstable patients was published. Vollman (2012) noted a lack of evidence with which to answer this question directly from literature and pulled from other areas of related evidence for suggested recommendations on this care topic. Lee (2012) presented a comprehensive overview of guidelines, evidence-based definitions, and recommendations for the monitoring of intra-abdominal pressure due to a lack of current guidelines and consistency of practice. This care was highlighted by the nurses in this current study the statement concerning setting up abdominal pressure monitoring despite guidelines or policies.

End of life care. There is a need to create evidence-based guidelines that keep the patient's needs and desires in mind when providing end-of-life care. Many text responses in round three highlighted that nurses want to advocate for and collaborate with patients and families at the end-of life: *"I think that the nurse should not act independently because by our license, we cannot prescribe. But I would certainly get the palliative care specialist and the physician together on providing adequate orders for adequate*

medication to meet the dying patient's needs" and *"As long as suffering is not an outcome. I would also abide by patient/family wishes too."*

Coombs, Long-Sutehall, and Shannon (2010) proposed a concern relating to the fact that despite prominent attention in the critical care setting, end-of-life care remains a challenge for bedside critical care nurse. Key issues found by the authors were a need for greater discussion and understanding of the roles and motivations of health professionals and families concerning end-of-life care as well as improved communication skills when engaging in end-of-life discussions across the healthcare community. Vanderspank-Wright, Fothergill-Bourbonnais, Brajtman, and Gagnon (2011) explored the experiences of critical care nurses who cared for patients during the end-of-life stage and noted nurses as the primary caregivers to patients and families during this process. Through interpretive phenomenology, they found the essence of this experience was: "trying to do the right thing" with a major theme identified as "working in professional angst" or "not being on the same page" identified by all participants. Critical care nurses were described as conflicted between physician's orders and family members' wishes.

In systematic review of end-of-life literature, Frost, Cook, Heyland, and Fowler (2011) found that patients and clinicians may approach end-of-life discussions with different expectations and preferences. Awareness of these factors was suggested to aid in communication and guide clinicians in end-of-life discussions. Berry and Zecca (2012) discussed the use of sedatives in critically ill patients and offer sedation management direction based on review of evidence in literature. This current study findings relate not only to statements produced by the Delphi participants, but also highlights the themes for a need for better communication and guidelines as well as some decision-making leeway

for end-of- life care. Berry and Zecca pointed to a balance that nurses working in critical care must maintain in the delivery of care and comfort with respect to sedation. They suggested use of an evidenced-based, multidisciplinary approach, including critical care nurses, in protocol development. Bell (2012) reviewed a guide for acute pain management in critical care stating that "there is no single standard practice, pain assessment tools, or medication plan that will be universally applicable" (p. 83).

Communication and decision making. This particular theme is overarching and extends through the other themes as participants voiced a need to collaborate with other healthcare professionals, especially the physician, for the care of patients. The nurses showed a desire for direction in decision-making and better guidelines, for example: *"If there is a question, I would rather the care be collaborative"* and *"Policies need re-evaluated if they are routinely being broken."*

Rauen et al. (2008) described a need for critical care nurses to base practice on science by using research to answer questions, establishing protocols, and promoting critical thinking and decision making at the bedside. Flynn, VonRueden, Rauen, and Chadwick (2011) pointed to a lack of congruency between philosophical goals of practice decisions and clinical realities as a barrier to the implementation of evidence-based practice at the bedside which requires commitment and an effective process. Plost and Nelson (2007) emphasized the use of protocols to simplify processes, standardize care, facilitate patient safety, and reduce healthcare costs, but noted the lack of compliance with these protocols can hinder its own success. In their study, Plost and Nelson were able to increase compliance with protocols in the critical care setting when nurses were empowered to lead the protocol compliance improvement process. The decision to place

nurses as leaders in the initiative were based on appreciation for their expertise in patient care and constant presence at the bedside, the use of their critical thinking skills to determine when a protocol should be implemented, and their understanding of the evidence underlying the protocols.

Mattox (2012) reviewed links between tasks and errors in suggesting strategies for improving patient safety within critical care. Mistakes occur when actions proceed as planned, but the plan is not adequate to achieve the intended aim. This is similar to the question asked in this study as nurses considered time when standard practice guidelines did not meet the needs of the patient situation. Mattox (2012) discussed that some rules intended to fit the situation do not meet the exact clinical situation specifics. Mattox pointed to standardization of processes as having the most significant promise in reducing health care related errors. Examples were noted such as success as seen in the standardization of hand-off communication and the care standardized for Rapid Response Team as well as a need for a well-designed checklists to aid in cognitive function assessment and evaluation.

Visitation. The theme of visitation contributed some interesting results as this is a current topic in critical care. The participants highly supported bending visitation policies as agreeable and acceptable care with those few who disagreed aimed at getting the policy changed so that bending the rules would not be necessary. In round two, the statement for limiting of visitation hours did not arrive at any consensus, but this focus reached moderate support by round three with a mixture of text responses supporting open visitation as well as those nurses voicing visitation as a distraction away from patient care. Interestingly, the panel judged the allowance of pet visitation as the tenth

ranked statement with high support in round two and round three. The few opinions that differed concerned a need to learn more as well as an open acceptance of pet therapy supporting the needs of the patient.

In systematic review of visitation models used in adult critical care settings, Ciufo, Hader, and Holly (2011) found that nurses viewed visiting hour policies as guidelines meant to be flexible and bent as needed for the benefit of the nurse and the patient. These flexible policies are considered congruent with concepts of patient-and-family-centered care. This echoes the responses from the Delphi participants. Harden et al. (2011) supported nurses planning visitation based on individual patient needs as each individual is different, and the patient's need for family and friends may be variable. The authors suggested a tailored visitation policy is needed to ensure optimal outcomes and should be considered in hospital guidelines.

Attributes of positive deviance. The findings from this study do not support that all experienced critical care nurses are deviating from standard practice when guidelines are lacking. The participants appeared to agree that deviations are necessary in limited circumstances. In relation to the model of positive deviance in nursing within the theory of complexity, the nurses fluctuated between the two paths: a complex adaptive path to answer a wicked question and a simple linear path of following the rules. Participants were specifically asked to answer the wicked question concerning care provided when guidelines were lacking from which answers followed the complex adaptive path and embraced the suggested attributes for positive deviance. In their evaluation of the care provided by others nurses, there was not necessarily consensus on which path to take.

Many participants did not support specific statements due to an opinion that the simple linear path of following the rules was the best answer to the situation as presented.

Implications for Practice

This investigation of positive deviance is timely because of the complexity of the healthcare environment and the focus turning toward patient-centered care and safely delivered outcomes. There are important implications for the delivery of healthcare when nurses deviate from standard practice guidelines in order to provide patient-centered care, especially if the outcomes of that care are unrecorded and lost to historical documentation. Nurses are challenged by professional development trends and policy changes to recognize the outcomes of healthcare and patient care experiences that are impacted by the decisions they make (Dowding & Thompson, 2003).

It is timely that this topic is investigated with the complexity of the healthcare environment and the focus turning toward patient-centered care and safely delivered outcomes. This study provides important support for the key issues and recommendations from the Multisociety Strategic Planning Task Force for Critical Care Research that was published in January of 2012 (Deutschman et al.). This task force was a collaboration of the 4 largest professional societies involved in critical care in the United States (American Association of Critical Care Nurses, the American College of Chest Physicians, the American Thoracic Society, and the Society for Critical Care Medicine). In 2009, they formally established the Critical Care Societies Collaboration to explore common issues, collectively identify challenges and establish priorities. Included in the overarching themes and challenges, the task force identified needs for human research to account for the complexity of critical illness and injury and patient phenotypic

heterogeneity. This overarching theme supports the use of complexity theory as a suitable theoretical underpinning for research in critical care.

The dominant themes gathered in this Delphi study are best highlighted by the key research priority in the area of "health service and delivery research". Specifically, the taskforce pointed to 4 needs for this area: a need to identify variables that affect outcomes and develop meaningful and reproducible performance metrics and improvement processes; identify strategies to improve communication and coordination of care delivery; determine which tools, processes, and programs (checklists as an example) most effectively promote transfer and implementation; and examine strategies for preventing errors and facilitating error reporting and assess the effects on patient outcomes (Deutschman et al., 2012).

More specifically, the task force suggested looking at process factors, outcomes measures, structural organizational variables, and improvement strategies for palliative and end-of-life care as well as the analysis and improvement of inter-professional team and team-family communication related to decision making and process improvements. Results of this Delphi study have made steps in this direction by pointing to areas in which better guidelines would improve health service and delivery.

An increase in guidelines is suggested by which to practice without the rigid constriction of a strict policy. Guidelines should guide practice and assist in allowing nurses to provide care that is centered on the best needs of the patient in the specific care situation. Hartjes and Gilliam (2012) discussed the implementation of new practice in the absence of evidence-based literature as was the case described in many examples

provided by the Delphi participants. The authors pointed to a need for clinical practice to undergo continuous assessment to ensure current practices are implemented and evaluated for impact.

Checklists or guidelines will not guarantee everything will go right, as there are plenty sources of uncertainty and imperfection, but nonetheless, they can help. Teamwork and communication are also suggested as answers to identify and address each patient's unique, potentially critical dangers (Gawande, 2009). Checklists should not tell a nurse what to do as it is not a formula, but rather it should help a nurse be as smart as possible every step of the way. The checklist should ensure that the nurse has the critical information when it is needed and that the nurse is systematic about decision making and has communicated with all relevant parties. A good checklist could establish a higher standard of baseline performance (Gawande, 2009).

Dr. Pronovost looked at streamlining procedures in order to improve patient safety with checklists, discovering that physicians and nurses needed a patient-driven environment with scientific results to know the success of their efforts (Pronovost & Vohr, 2010). The bottom line is that outcomes are needed for accountability and to support policy change. If outcomes are improved, then quality of patient care is improved. Nurses have the clinical power to influence health outcomes given the opportunity to provide an accurate account of the care provided at the bedside; therefore, as nurses may be generating new knowledge on the fly, they must be empowered to use data to modify practice. Nurses can drive practice change through documentation of deviations in guidelines for specific patient care situations. There needs to be a link to interventions that meet the specific patient needs by linking demographic and patient

specific assessment data. This would provide support for evidence-based practice data for policy change if needed. Further work is recommended on providing an outlet for nurse to safely report the exact care they are providing in order to have the outcomes of their care acknowledged.

Study Limitations

As Keeney, Hasson, and McKenna (2006) forecasted, it was not until the Delphi study was undertaken that the difficulties and challenges of the methodology were apparent. Validity, reliability, and generalizability were all threatened during data collection and data analysis. Specifically, the data collected in this study depended upon the participants having had the experience under investigation, being able to process and remember the experience, and demonstrating a willingness and ability to articulate the experience in text response. Despite assurance of quasi-anonymity, there may have been fear in relating experiences that may put their nursing licenses in jeopardy.

There was the possibility of researcher bias in observing patterns in the qualitative statements or not clearly understanding the meaning of response as intended by the participant. The information produced by the surveys described in this study was difficult to understand at times as there was a large volume of qualitative data for interpretation. The statements for round two were presented in the participants' own words as much as possible which may have lacked detail for evaluation of the situation as described by round three responses.

While attrition between iterations was an expected problem with Delphi methodology, the decrease in participation between surveys in this study was not considered detrimental to the study results. Care was taken during the study to select

participants who were representative of bedside critical care nurses. Despite specific demographic requests, the panel represented a wide variety of critical care nursing professionals, and the final round featured 79% of respondents who reported themselves as being solely bedside nurses. A bias may have been related to the specific insights of managers and other specialties represented in having a different perspective from a nurse exclusively working at the bedside. It cannot be said that the participants involved were representative of the population of experienced bedside critical care nurses. The results cannot be generalized to other settings or a wider population. The study was confined to critical care nurses caring for the adult population rather than including the views from critical care nurses caring for the pediatrics or neonatal population. Consideration of other groups might have shown different results.

A limitation could be panel members who changed their minds after viewing the group response and believing this response to be the 'correct' response. This would challenge the validity and reliability of the study. The current study allowed participants to provide statements in response to non-consensus beliefs in order to allow all possible viewpoints. No 'correct' answers were sought in this study, instead identification of viewpoints and differences in viewpoints among panel members were identified and valued. It is important to note that the statements of care identified in this study cannot be considered as a comprehensive assessment of incidences that occur when standard practice guidelines do not meet the needs of patients. The statements generated are used to raise awareness of important issues of critical care nurses trying to provide patient-centered care.

The system used to analyze the scales numerically clearly identified the extent of agreement and support for statements; however, the reasons associated with the ratings provided in round three presented more important challenges to interpretation, coherence and relevance. In hindsight, if the statements generated by the panelists could be used as guidelines to write specific patient care scenarios to feed back to the panel, then some of the ambiguity of the situations for evaluation may have been solved.

An interesting demographic that was not collected in this study was the different shift rotations worked by the participants. Many of the round one and round three text responses made reference to decisions made in relation to working a night shift when collaborating with physicians may be limited. Also, in looking at the age of the participants as well as years working in critical care, no specific time limit was requested for the respondents to provide examples. Some outdated practices that now either have a current and applicable guidelines or updated equipment and/or technology with which to address the situation were noted. It may have been more prudent to ask for the wicked question within a specific time of the last year.

Conclusions and Recommendations

The existence of a consensus from a Delphi study does not mean that the correct answer has been found; it merely means that participants have agreed on an issue or set of issues (Keeney et al., 2006). Participants agreed with breaking rules, but not all rules in all situations, nor on the best way to break rules in specific situations. Because the aim of this study was to explore all possible considerations, consensus as well as non-consensus and open-ended participant responses were taken into consideration. The key issues that arose during this study ultimately provided a list of guidelines to review for future

research. This future research should align with newly published issues and recommendations for critical care research by a mulitsocietal task force as well as support the proposed model of positive deviance within the theory of complexity.

It is recommended that guidelines to review for future research pertain to violations during emergent situation, end-of-life care, communication and decision-making guidelines, and visitation policies with an aim toward allowing nurses to provide patient-centered care.

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Chapter 4: Summary and Conclusion

This research effort began with three major goals, to describe the concept of positive deviance within the context of nursing practice, to determine the presence and extent of positive deviance in critical care nursing practice, and to explore the judgments of expert nurses regarding specific acts of positive deviance. Summarily, each of the goals was accomplished; and as a result, many new goals emerged.

A concept analysis was conducted and attributes, antecedents, consequences and exemplars were identified. Subsequent to exploration of the concept, a model of positive deviance within complexity science was proposed. The model was used as a guiding framework for the study of positive deviance in critical care nurses.

The research project aimed at understanding the care that was actually given by critical care nurses when practice and standard guidelines were not sufficient to meet the needs of the individual patient. The Delphi study guided by a wicked question was used to explore these implied but seldom acknowledged actions taken by nurses to provide appropriate care for patients, often putting themselves at risk by breaking rules. In 1990, Hutchinson suggested the use of qualitative field research to explore and describe how nurses bend rules for the sake of the patient. There was no evidence in the literature to support that this type of research ever occurred. This project filled that gap by exploring specifically how nurses bend rules to provide patient-centered care.

Seasoned critical care nurses responded to the wicked question by acknowledging their participation in deviant care for the sake of the patient and provided personal

examples of such deviant care. These personal examples were reduced to 67 practice statements in 8 thematic categories. The nurses voluntarily continued in the study to evaluate the appropriateness of each care statement and make a judgment of agreement or disagreement with the care practices. The ranked statements depicted top statements that with which the nurses expressed both agreement and disagreement. From analysis of that evaluation, four categories of priorities emerged: the violation of policies in emergent situations, end-of-life issues, communication needs and lack of decision-making guidelines, and visitation. These priorities can be used as a basis for improving patient-centered care by highlighting research needs, evidence based care guideline needs, and documentation needs as mirrored by a key issue and recommendation for critical care research from the Multisociety Strategic Planning Task Force for Critical Care Research (Deutschman et al., 2012).

Furthermore, the examples shared by the nurses supported the presence of the model concepts and the two paths of care delivery: patient-centered care and norm-referenced care. Nurses repeatedly emphasized the desire to work within the practice and standard guidelines to provide patient-centered care; but in the absence of appropriate norm referenced care, nurses will use positive deviance. The examples of positive deviance described by the nurses depart from the norm; are intentional and honorable; are innovative, creative or adaptable; and involve risk. Additional concepts that need to be explored and possibly added to the model concern evidence-based practice and collaboration with other members of the health care team.

The nurses' desire to provide care that is norm-referenced was manifest by the repeated mention of a need for standard practice guidelines. An increase in guidelines by

which to practice without the rigid connotation of a strict policy is suggested. Guidelines should guide practice and assist in allowing nurses to provide care that is patient-centered and situation specific.

In a time of increased emphasis on patient outcomes, it becomes very important for nurses to have a way to safely report the deviations that they make for the sake of patients. The true cause and effect relationships will not be evident without accurate documentation of care. As more healthcare professionals function as "knowledge workers rather than task-driven care providers" (Melnyk & Davidson, 2009, p. 291), nurses "will need to be able to describe what nursing services are used, describe the mechanism of how nursing services affect patients and their families, and evaluate the impact of the nursing services on patient and family outcomes" (Pelzand, Wood, & Black, 2010, p. 192). Further work is recommended on providing an outlet for the nurse to safely report the exact care they are providing in order to have the outcomes of their care acknowledged.

Finally the nurses repeatedly indicate the need for collaboration in care decisions. This can be further facilitated through inclusion of nurses at the table where policies and procedures that affect the delivery of patient care are made. Gawande (2009) highlighted the need to push the power of decision making out to the periphery from the center when confronted with complex, non-routine problems. "You need to give people the room to adapt, based on their experience and expertise. All you ask for is that they talk to one another and take responsibility. That is what works" (Gawande, 2009, p. 73).

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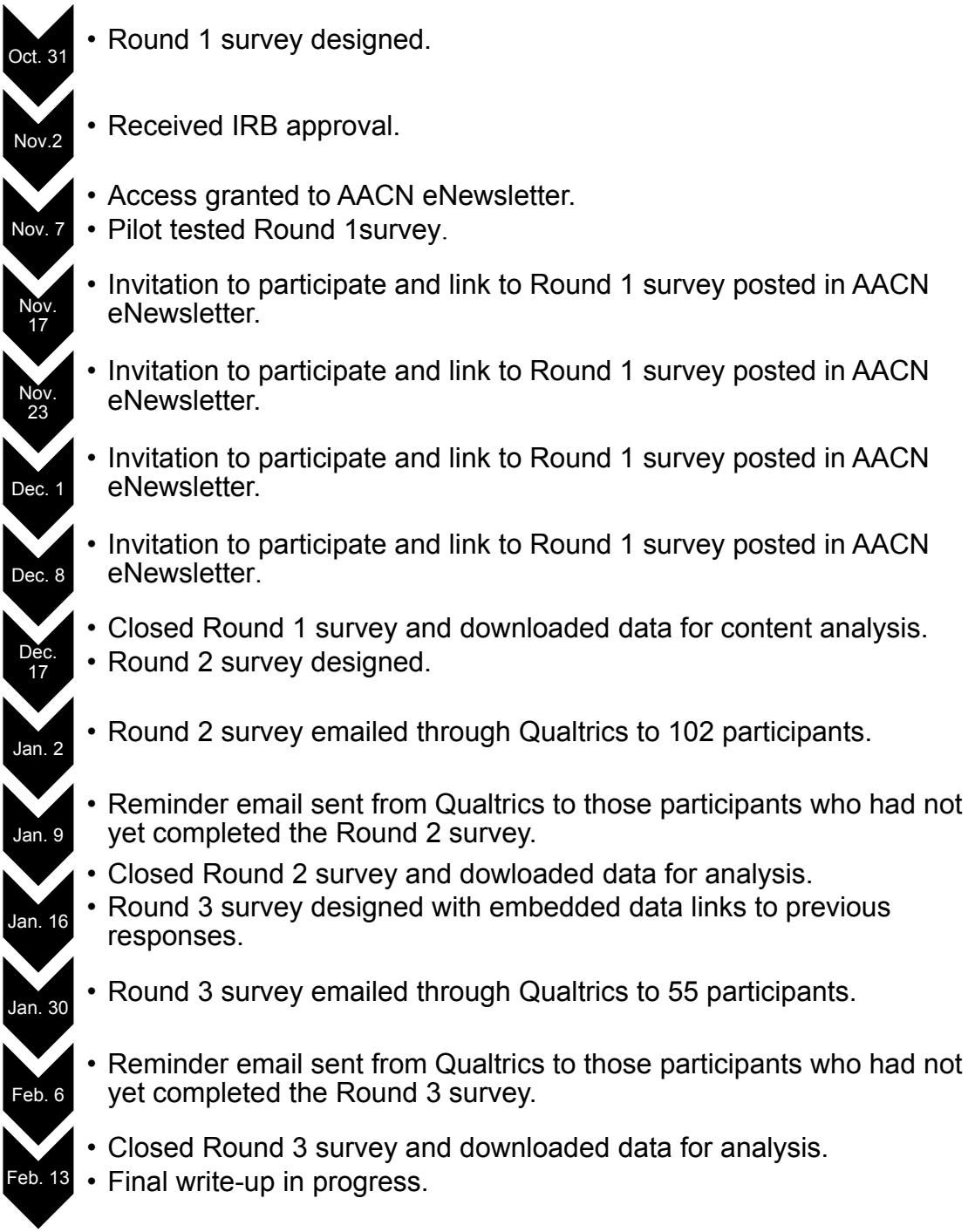
Appendix A: Delphi Study Research Timeline



Appendix B: IRB Approval

The University of Texas at Tyler
Institutional Review Board
November 2, 2011

Dear Ms. Gary:

Your request to conduct the study entitled: *How Do Critical Care Nurses Use Positive Deviance to Deliver Patient-Centered Care* is approved as an expedited study, IRB #F2011-27 by The University of Texas at Tyler Institutional Review Board. This approval includes a waiver of written informed consent as long as the introductory instructions for the questionnaires state the voluntary nature of the study, any risks involved (only in first round), and who to contact other than you as the PI. In addition, ensure that any research assistants or co-investigators have completed human protection training, and have forwarded their certificates to the IRB office (G. Duke).

Please review the UT Tyler IRB Principal Investigator Responsibilities, and acknowledge your understanding of these responsibilities and the following through return of this email to the IRB Chair within one week after receipt of this approval letter:

- This approval is for one year, as of the date of the approval letter
- Request for Continuing Review must be completed for projects extending past one year
- Prompt reporting to the UT Tyler IRB of any proposed changes to this research activity
- Prompt reporting to the UT Tyler IRB and academic department administration will be done of any unanticipated problems involving risks to subjects or others
- Suspension or termination of approval may be done if there is evidence of any serious or continuing noncompliance with Federal Regulations or any aberrations in original proposal.
- Any change in proposal procedures must be promptly reported to the IRB prior to implementing any changes except when necessary to eliminate apparent immediate hazards to the subject.

Best of luck in your research, and do not hesitate to contact me if you need any further assistance.

Sincerely,

Gloria Duke, PhD, RN

Gloria Duke, PhD, RN

Chair, UT Tyler IRB

Appendix C: Email Correspondence with AACN for Population Access

From: Natasha Varn-Davis [mailto:research@aacn.org]
Sent: Monday, March 07, 2011 3:31 PM
To: Gary, Jodie C.
Subject: RE: Doctoral Student- access to List Serve for piloting an instrument

Good Afternoon Jodie,

For List Serve consideration, please submit the following information to us:

* copy of the proposal (we look for consistency with the AACN research agenda)
* copy of the survey instrument (to make sure there is nothing problematic with the language for our members)
* IRB approval documents (or whatever methodology you are using as protection of human subjects)

Please remit copies of these documents to research@aacn.org. All documents will undergo an internal review by our Clinical Nurse Specialists for approval. We will contact you once the review process is complete regarding any remaining requirements and/or next steps for List Serve inclusion.

Sincerely,

Natasha S. Varn-Davis, PhD
Practice, Education, and E-Learning
American Association of Critical-Care Nurses
101 Columbia
Aliso Viejo, CA 92656

November 2, 2011

Natasha S. Varn-Davis, PhD

Practice, Education, and E-Learning
American Association of Critical-Care Nurses
101 Columbia
Aliso Viejo, CA 92656

Greetings Dr. Varn-Davis:

I, Jodie C. Gary, a University of Texas at Tyler doctoral student, am asking for permission to conduct research utilizing the List Serve for the American Association of Critical-Care Nurses (AACN) for my study "How Do Critical Care Nurses Use Positive Deviance to Deliver Patient-Centered Care?".

I, the primary investigator, will recruit participants via email contact to participate in the research study. The intended dates of research include the months of November 2011 to February 2012. Copies of the research proposal, including the initial survey information and instruments, and University of Texas at Tyler IRB approval are attached as requested.

These documents are remitted to research@aacn.org for internal review by the Clinical Nurse Specialists for approval. Thank you for your consideration.

If you have any questions please feel free to contact me via email or via phone.

Sincerely,

Jodie

Jodie C. Gary, PhD(c), RN
Doctoral Student at the University of Texas at Tyler
2310 Bristol
Bryan, Texas 77802
979-218-4115
jgary2@patriots.uttyler.edu

Danita Alfred, PhD, RN (Dissertation Chair)
College of Nursing
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799
phone - 903/566-7019
email – dalfred@uttyler.edu

From: Linda Bell [linda.bell@aacn.org]
Sent: Monday, November 07, 2011 5:08 PM
To: Jodie Gary
Cc: Natasha Varn-Davis
Subject: Your request for posting your research study

Hi Jody:

I have looked at the documents you submitted for the research study and have a few questions to understand where you would like to have this study posted. Since your study group is nurses with 5 or more years experience caring for adult patients there are a couple of alternatives. Our list rental process does not give out direct e-mail so you would need to consider one of the following:

a) Inclusion of your research request in our eNewsletter that goes out weekly to the membership. Circulation is around 100,000 with a 14% open rate. Since you have built in the opportunity to screen potential applicants at the beginning of your survey this could work for you and you would reach your proposed sample size easily. We can put the request in the newsletter up to a maximum of 4 weeks or when you reach adequate numbers.
b) This could be posted to the AACN Facebook page as an alternative but that would be your choice. The numbers are not as great and I'm not sure how quickly you would get your sample.
c) Posting to either the ANPACC or NIHMBL lists would be an option, but those audiences are more targeted to advanced practice and nursing leaders which may skew the responses.

Before we could consider any of these options I would still need to see a copy of your survey for internal review to assure that it is consistent with AACN mission, vision and values.

Let me know how you would like to proceed.

Linda Bell, RN, MSN
Clinical Practice Specialist
American Association of Critical Care Nurses
A Community of Exceptional Nurses
Linda.bell@aacn.org
800-394-5995 ext 318

From: Jodie Gary [mailto:jgary2@patriots.uttyler.edu]
Sent: Tuesday, November 08, 2011 5:46 PM
To: Linda Bell
Cc: Natasha Varn-Davis; Danita Alfred
Subject: RE: Your request for posting your research study

Thank you Ms. Bell for your response and options:
My survey consists of demographic style questions and then an open ended qualitative style question for participants to answer. I appreciate the options for consideration and believe that option a) would best meet my needs.

"a) Inclusion of your research request in our eNewsletter that goes out weekly to the membership. Circulation is around 100,000 with a 14% open rate. Since you have built in the opportunity to screen potential applicants at the beginning of your survey this could work for you and you would reach your proposed sample size easily. We can put the request in the newsletter up to a maximum of 4 weeks or when you reach adequate numbers. "

Please let me know if I can provide further clarification. This survey would be taken in Qualtrics by the participant. Again, I appreciate your time and attention. Jodie Gary

I have attached the questions and invitation to participate.

From: Linda Bell [linda.bell@aacn.org]
Sent: Tuesday, November 17, 2011 4:32 PM
To: Jodie Gary [mailto:jgary2@patriots.uttyler.edu]
Cc: Danita Alfred

Ladies: I wanted you to see that the first 'installment' for the survey was posted to the e-newsletter that was sent out today. It is #5.

From: AACN E-Newsletter [mailto:enewsletter@aacn.org]
Sent: Thursday, November 17, 2011 12:53 PM
To: Linda Bell
Subject: AACN Critical Care Newsline

Critical Care Newsline, the electronic newsletter from the American Association of Critical-Care Nurses, contains information selected just for you by our clinical practice experts. In each issue, you'll find links to resources, research abstracts (individual sites may require registration and a fee to access complete articles) and websites that will keep you informed on issues affecting nurses and the nursing profession.

Nov. 17, 2011
****
1. **NEWS** TJC revises influenza vaccine standard
2. **CALL TO ACTION** Apply for HHS-CCSC HAI award
3. **EVIDENCE** Sepsis admissions, survival up; long-term care discharges also rise
4. **GUIDELINE** Use of intensive insulin therapy for glycemic control
5. **CALL TO ACTION** Participate in survey on providing care when guidelines are lacking
6. **CALL TO ACTION** November is Lung Cancer Awareness Month
7. **CALL TO ACTION** Comment on AHRQ's VTE Common Format
8. **CALL TO ACTION** Comment on FDA's proposed opioid training program
9. **CALL TO ACTION** Nominate candidates for 2013 DRL by Dec. 1
10. **NEWS** IOM releases new technology report
11. **EVIDENCE** Sodium intake higher in heart failure patients with sleep apnea
12. **CALL TO ACTION** Submit nominations for AACN President's Awards for Chapters
13. **RESOURCE** Center to Advance Palliative Care has ICU resource
14. **MEMBER BENEFIT** Free enrollment in ChangeAnything.com for one year
15. **CLINICAL PRACTICE RESOURCES**
16. **AACN RESOURCES** Find jobs at NursePath.com
****

5. **CALL TO ACTION** Participate in survey on providing care when guidelines are lacking
You are invited to participate in a series of three confidential online questionnaires about the opinions of critical care nurses regarding care provided when standard practice guidelines are lacking, to meet patient-specific care needs. Doctoral student Jodie Gary from the University of Texas at Tyler College of Nursing requests your participation as an expert in your field to find areas of agreement and gaps in knowledge. Read inclusion criteria and participate in this project.

Appendix D: Delphi Study Invitation to Participate, Informed Consent, and Round One Survey

Dear fellow AACN member:

How nurses respond when faced with the dilemma of wanting to provide patient-centered care in the absence of patient-centered practice guidelines remains relatively unexplored. Of interest is the patient care provided by experienced critical care nurses when faced with ill- fitting practice guidelines. Standards may not be available to guide nurses or may not be realistic for implementation at the point of care. Nurses may be forced to react creatively to meet the needs of their patients.

My name is Jodie Gary. I am a doctoral candidate in the College of Nursing at the University of Texas at Tyler. I am asking you to participate in my dissertation study regarding the opinions of critical care nurses regarding care provided when standard practice guidelines are lacking to meet patient specific care needs. The research is being supervised by Dr. Danita Alfred and has met IRB approval from the University of Texas at Tyler.

This letter is to provide information about the research so that you can make a decision about whether you want to participate. I am inviting participants that meet the following criteria:

a) Are a licensed registered nurse in the United States
b) Have 5 or more years of experience in an adult critical care practice setting
c) Work full-time (>36 hours a week) and
d) Willing to provide a current email address that will be kept confidential.

If you decide to participate, you will be asked to serve with other experienced critical care nurses as experts in your field. The study technique will find agreement among the group of experts as well as identify gaps in situations when standard practice guidelines do not meet patient specific care needs. The responses are all given and shared anonymously.

As a participant you will be asked to respond to three questionnaires over a period of approximately three months via computer survey. The first questionnaire is one opened-ended question about the care you provided in instances when standard practice guidelines such as policies, procedures, or order sets did not fit the specific care needs of your patient's situation. You can respond in short answer. In addition, you will also be asked to complete a short demographics questionnaire as well as provide a current email address to which the next two surveys will be sent. The second and third questionnaire will be given to you with the anonymous results of the previous round of responses and ask you to rate the response on acceptability and feasibility as well as express your viewpoints concerning unacceptability and infeasibility. Each of the three surveys should take no more than 15 minutes of your time.

Of course you are not obligated to participate in this study and you may withdraw at any time. Only this researcher and associated faculty assisting in the review of the data will have access to raw information gathered. Submission of the online survey will be considered informed and voluntary consent to participate and to use and publish aggregate study results. I am excited about your contribution to this study. Thank you for your time, attention, and consideration.

If you have any questions please feel free to contact me via email or via phone.

Sincerely,
Jodie C. Gary, PhD Candidate, RN
Doctoral Student at the University of Texas at Tyler
phone- 979/436-0144
email- jgary2@patriots.uttyler.edu

Danita Alfred, PhD, RN (Dissertation Chair)
College of Nursing The University of Texas at Tyler
3900 University Blvd. Tyler, TX 75799
phone - 903/566-7019
email – dalfred@uttyler.edu

Would you like to participate?

- ❍ Yes
- ❍ No

Do you feel that you have been informed concerning the purpose of this study and your rights as a participant?

- ❍ Yes
- ❍ No

Are you currently licensed to practice as a Registered Nurse in the United States?

- ❍ Yes
- ❍ No

How long have you been a registered nurse?

Highest nursing degree held:

- ❍ Diploma
- ❍ Associate Degree
- ❍ Bachelors Degree
- ❍ Masters Degree
- ❍ Doctoral Degree

Do you work in a hospital setting as a critical care nurse?

- ❍ Yes
- ❍ No

What position(s) do you currently hold? Select all that apply.

- ☐ Care/Bedside/Staff Nurse
- ☐ Manager/Administrator
- ☐ Charge Nurse
- ☐ Clinic Nurse
- ☐ Nurse Educator/Staff Development
- ☐ Clinical Nurse Specialist
- ☐ Academic Faculty
- ☐ Clinical Director
- ☐ Other (specify) _____

In what critical care setting do you practice? Select all that apply.

- ❑ Intensive Care Unit (ICU)
- ❑ Coronary Care Unit (CCU)
- ❑ Combined ICU/CCU
- ❑ Cardiovascular-Surgical ICU
- ❑ Surgical ICU
- ❑ Medical ICU
- ❑ Combined Medical-Surgical ICU
- ❑ Neuro/Neurosurgical ICU
- ❑ Other (specify) _____

Please indicate the Trauma Level designation of your facility.

- ❍ Level I
- ❍ Level II
- ❍ Level III
- ❍ Level IV
- ❍ No Designation
- ❍ I am not sure

How many hours per week do you usually work in a critical care area with primarily adult patients?

- ❍ Average of 36 or more hours per week
- ❍ Average of less than 36 hours per week

How many years have you been working with critically ill patients?

In which state do you currently reside?

Has there ever been a time in your nursing care when you deviated from standard practice guidelines for the sake of your patient?

- ❍ Yes
- ❍ No

What is your age?

What is your gender?
- ❍ Male
- ❍ Female

Ethnicity (choose the category that most represents your racial/ethnic background or status):
- ❍ Caucasian (not Hispanic)
- ❍ African American (Black)
- ❍ Hispanic (not Black)
- ❍ Native American Indian
- ❍ Oriental, Asian, or Pacific Islander
- ❍ Other :Please specify _____

Please list any specialty certifications that you hold (such as CCRN). Please fill out if applicable.

Please provide an email address in which to send the subsequent surveys (Round 2 and Round 3). This email will be kept confidential.

Round 1 Question:

I am seeking the experiences and opinions of critical care nurses regarding care provided when standard practice guidelines are lacking to meet patient specific care needs. Consider times in your nursing career when a standard practice guideline did not match your patient's specific needs in a clinical situation. Please give a specific example of a care you delivered for the sake of the patient that was not totally in line with the standard practice guidelines, protocols, orders, or instructions in effect at the time the care was delivered.

Thank you! Your time and response to this study are greatly appreciated. The second and third questionnaire will be sent to you with the anonymous statements from this round of responses. You will be asked to rate the response on acceptability and feasibility as well as express your viewpoints concerning unacceptability and infeasibility. Looking forward to the results....

Appendix E: Delphi Study Round Two Instructions

Delphi Round 2

Thank you for your willingness to serve as an expert in critical care nursing by responding to the first survey. Compiled for your evaluation are the condensed responses from you and your peers concerning the patient care provided when guidelines were lacking. In the first survey you considered times when standard practice guidelines did not match patient specific needs. Most of you gave examples of the care delivered despite having an order, policy, guideline or protocol.

In condensing common themes, I found specific care examples; common practice issues with labs, blood administration, comfort measures, fluid boluses, medication administration, and visitation; and general statements about nursing practice.

In this survey please evaluate the statements based on your judgment of the care or statement as reasonable or appropriate and then your acceptability of the care or statement. You are provided a no judgment option as to not force you to either support or oppose any one given statement. This should take no more than 15 minutes of your time.

Again, my name is Jodie Gary and I am a doctoral candidate in the College of Nursing at the University of Texas at Tyler. This survey is the second round of my three round Delphi dissertation study of critical care nurses regarding care provided when standard practice guidelines are lacking to meet patient specific care needs. The research is being supervised by Dr. Danita Alfred and has met IRB approval from the University of Texas at Tyler.

You are under no obligation to continue participating in the study and may withdraw at any time. Only the researcher and associated faculty assisting in the review of the data will have access to raw information gathered. Submission of the on-line survey will be considered informed and voluntary consent to participate as well as to use and publish aggregate study results.

Please complete this survey by January 16th. In the final survey you will be given the opportunity to view the results from this round as well as express your viewpoints on reasonable or appropriate care and the acceptability of specific statements. Again, I am excited about your contribution to this study. Thank you for your time, attention, and consideration.

If you have any questions please feel free to contact me via email or via phone.

Sincerely,

Jodie

Jodie C. Gary, PhD Candidate, RN
Doctoral Student at the University of Texas at Tyler
phone- 979/436-0144; email- jgary2@patriots.uttyler.edu

Danita Alfred, PhD, RN (Dissertation Chair)
College of Nursing The University of Texas at Tyler
3900 University Blvd. Tyler, TX 75799
phone - 903/566-7019; email – dalfred@uttyler.edu

Appendix F: Delphi Study Round Three Instructions

Delphi Round 3

Thank you for your continued willingness to serve as an expert in critical care nursing in this study. This is the final survey and will tie the study together. Your participation is greatly valued. I am excited to say that there are 55 participants for this panel!

In the last survey each of you evaluated the panel generated statements based on your judgment of the care or statement as reasonable or appropriate and then your acceptability of the care or statement. You were provided a no judgment option as to not force you to either support or oppose any one given statement.

In this round you are presented the same statements as well as reminded of your personal judgment of the statement as well as the most frequently chosen judgment from the panel of your peers. A percentage of nurses who gave the most frequent judgment are given as well as the number of nurses who provided a no judgment response. You are asked to re-rate the statement in light of the group judgment. If your first judgment differs from the group judgment and you would not change your response in this round despite knowledge of the group judgment, please provide a reason. This may feel tedious, but is very important as I am interested in presenting levels of consensus as well as highlighting various viewpoints of disagreement.

This survey is my last contact with you and I cannot express enough gratitude for your time and commitment. In evaluating each statement again, the survey may take you 30 minutes. Please stick with it as your judgments and comments are extremely important in looking at care provided by critical care nurses.

Again, my name is Jodie Gary and I am a doctoral candidate in the College of Nursing at the University of Texas at Tyler. This survey is the last round of my three round Delphi dissertation study of critical care nurses regarding care provided when standard practice guidelines are lacking to meet patient specific care needs. The research is being supervised by Dr. Danita Alfred and has met IRB approval from the University of Texas at Tyler.

As stated in previous rounds, you are under no obligation to continue participating in the study. Only the researcher and associated faculty assisting in the review of the data will have access to raw information gathered. Submission of the on-line survey will be considered informed and voluntary consent to participate as well as to use and publish aggregate study results.

Please complete this survey by February 12th.

The results are proving very interesting. Thank you for your time, attention, and consideration. If you have any questions please feel free to contact me via email or via phone.

Sincerely,

Jodie

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Appendix G: Round Two Results

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
1. Using hyperventilation as necessary to keep a patient's intercranial pressure manageable until a physician could arrive. n=54	3(6.5)	12(26.1)	22(47.8)	9(19.6)	8	Low	A-VA	None	3(6.4)	14(29.8)	22(46.8)	8(17.0)	7	Low	A-SA	None
2. Lowering the head of a patient's bed, despite ventilator bundle protocol to the contrary, during hypotensive episodes.	4(7.3)	5(9.1)	27(49.1)	19(34.5)	0	High	A-VA	None	5(9.4)	4(7.5)	29(54.7)	15(28.3)	2	High	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
3. Advancing a patient's diet beyond what is ordered while monitoring patient's tolerance.	7(13.0)	20(37.0)	8(14.8)	19(35.2)	1	None	None	None	8(14.8)	15(27.8)	11(20.4)	20(37.0)	1	None	None	Weak
4. Writing orders to administer sedatives and pull a femoral sheath on a combative patient scheduled for open heart surgery in the morning, in order to prevent injury, when a physician hung up the phone after stating "do whatever you have to do to make it through the night and do not call me again".	30(55.6)	15(27.8)	6(11.1)	3(5.6)	1	High	DI-I	None	26(47.3)	18(32.7)	8(14.5)	3(5.5)	0	High	SD-D	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
5. Setting up abdominal pressure monitoring after reading about the procedure on line due to lack of available hospital guidelines or policy due to surgeon's insistence for the monitoring.	8(14.8)	12(22.2)	21(38.9)	13(24.1)	1	Low	A-VA	None	6(11.3)	11(20.8)	24(45.3)	12(22.6)	2	Low	A-SA	None
6. Rapidly infusing three liters of warmed fluids to a diabetic ketoacidosis patient weighing 70 kilograms with a body temperature of 98 degrees in the absence of a facility policy or protocol.	10(23.3)	25(58.1)	6(14.0)	2(4.7)	12	High	I-DI	None	11(26.2)	23(54.8)	6(14.3)	2(4.8)	13	High	D-SD	None
7. Not completing the pre-operative checklist prior to sending a patient to the operating room.	23(45.1)	26(51.0)	1(2.0)	1(2.0)	4	High	I-DI	None	25(49)	22(43.1)	2(3.9)	1(2.0)	5	High	D-SD	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
8. Performing bedside abdominal washouts despite a protocol to perform this procedure in the operating room.	19(45.2)	16(38.1)	6(14.3)	1(2.4)	13	High	I-DI	None	19(45.2)	19(45.2)	3(7.1)	1(2.4)	13	High	D-SD	None
9. Increasing the FiO2 on a ventilated patient due to patient condition without orders to do so.	3(5.5)	7(12.7)	19(34.5)	26(47.3)	0	High	A-VA	None	1(1.8)	6(10.9)	19(34.5)	29(52.7)	0	High	A-SA	None
10. Bagging a patient at a faster than recommended rate during a code situation in order to improve oxygen saturation.	11(20.8)	22(41.5)	11(20.8)	9(17)	2	Low	I-DA	None	12(23.1)	19(36.5)	13(25.0)	8(15.4)	3	None	None	None
11. Holding the tube feeding on a critically ill patient without orders to hold the feeding.	4(8.3)	9(18.8)	24(50.0)	10(20.8)	8	Moderate	A-AV	None	3(6.5)	10(21.7)	26(56.5)	7(15.2)	9	Moderate	A-SA	None
12. Not following standard guidelines during emergent insertion of central lines.	10(18.9)	26(49.1)	15(28.3)	2(3.8)	2	Low	I-DI	None	10(19.2)	24(46.2)	13(25.0)	5(9.6)	3	Low	D-SD	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
13. Transferring a patient from critical care that did not meet the physician ordered minimum systolic blood pressure parameters.	8(17.4)	36(78.3)	2(4.3)	0	9	High	I	None	9(19.1)	34(72.3)	4(8.5)	0	8	High	D	None
14. Administering tPA (tissue plasminogen activator) or thrombolytic therapy beyond the accepted window of time.	6(12.0)	29(58.0)	14(28)	1(2)	5	Moderate	I-DI	None	8(17.8)	23(51.1)	13(28.9)	1(2.2)	10	Low	D-SD	None
15. Fashioning a rectal tube using a nasal trumpet and a Foley bag in order to protect the skin of a patient with continuous loose stool.	13(25.0)	16(30.8)	16(30.8)	7(13.5)	3	None	None	None	16(30.2)	15(28.3)	16(30.2)	6(11.3)	2	None	None	None
16. Not discontinuing a Foley catheter, per orders, for an incontinent, obese patient with excoriated skin.	4(7.8)	18(35.3)	23(45.1)	6(11.8)	4	None	None	None	4(7.8)	10(19.6)	28(54.9)	9(17.6)	4	Moderate	A-SA	None
17. Removing a Foley catheter prior to receiving orders.	3(6)	14(28.0)	25(50.0)	8(16.0)	5	Low	A-VA	None	2(3.9)	15(29.4)	25(49.0)	8(15.7)	5	Low	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
18. Sending a patient, who must return the next day for a treatment or procedure, home with IV access due to difficulty and/or patient discomfort with initiating intravenous access.	18(35.3)	19(37.3)	12(23.5)	2(3.9)	4	Moderate	I-DI	None	17(32.1)	21(39.6)	14(26.4)	1(1.9)	2	Moderate	D-SD	None
19. Breaking in-line suction to lavage, bag, and suction a ventilated patient in respiratory distress.	8(14.8)	12(22.2)	18(33.3)	16(29.6)	1	Low	A-VA	None	7(12.7)	10(18.2)	24(43.6)	14(25.5)	0	Low	A-SA	None
20. Using saline to lavage an intubated patient in order to stimulate a cough to expel a plug or thick secretions.	16(31.4)	8(15.7)	19(37.3)	8(15.7)	4	None	None	Weak	15(28.8)	9(17.3)	19(36.5)	9(17.3)	3	None	None	Weak
21. Suctioning a blood clot out of a mediastinal chest tube to prevent cardiac tamponade.	7(18.4)	13(34.2)	13(34.2)	5(13.2)	17	None	None	None	8(22.2)	10(27.8)	14(38.9)	4(11.1)	19	None	None	None
22. Not applying ordered SCDs (sequential compression devices) due to patient safety concerns in an ambulatory patient.	4(8.2)	17(34.7)	21(42.9)	7(14.3)	6	None	None	None	4(7.8)	16(31.4)	25(49)	6(11.8)	4	Low	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
23. Not maintaining sterile technique when inserting a catheter during an emergency or code situation.	9(17.3)	29(55.8)	11(21.2)	3(5.8)	3	Moderate	I-DI	None	8(16.0)	30(60.0)	9(18.0)	3(6.0)	5	Moderate	D-SD	None
24. Administering ice chips to a patient on a ventilator.	10(19.6)	25(49.0)	15(29.4)	1(2.0)	4	Moderate	I-DI	None	10(20.0)	26(52.0)	13(26.0)	1(2.0)	5	Moderate	D-SD	None
25. Turning a hemodynamically unstable patient in order to increase mobility.	4(7.8)	26(51.0)	16(31.4)	5(9.8)	4	Low	I-DI	None	4(8.2)	23(46.9)	18(36.7)	4(8.2)	6	None	None	None
26. Not turning a patient due to lack of hemodynamic stability.	2(3.9)	25(49.0)	19(37.3)	5(9.8)	4	None	None	None	1(2.1)	24(50.0)	17(35.4)	6(12.5)	7	Low	D-SD	None
27. Assisting a patient to increase mobility prior to a physician order.	1(1.9)	9(17.3)	27(51.9)	15(28.8)	3	High	A-VA	None	1(1.9)	6(11.5)	29(55.8)	16(30.8)	3	High	A-SA	None
28. Waiting to recheck lab values until the next morning, despite an electrolyte protocol requiring more frequent assessment of values.	18(34.6)	29(55.8)	4(7.7)	1(1.9)	3	High	I-DI	None	18(34.6)	29(55.8)	4(7.7)	1(1.9)	3	High	D-SD	None
29. Ordering labs prior to contacting a physician.	0	15(30.0)	27(54.0)	8(16.0)	5	Low	A-VA	None	1(1.9)	13(25.0)	28(53.8)	10(19.2)	3	Moderate	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
30. Using blood glucose readings obtained from a finger-stick interchangeably with serum level glucose readings.	3(6.1)	15(30.6)	27(55.1)	4(8.2)	6	Low	A-VA	None	3(6.0)	14(28.0)	27(54.0)	6(12.0)	5	Low	A-SA	None
31. Skipping ordered lab draws due to frequency and slow turn-around time between draws for results.	10(19.6)	30(58.8)	10(19.6)	1(2)	4	Moderate	I-DI	None	9(17.6)	30(58.8)	10(19.6)	2(3.9)	4	Moderate	D-SD	None
32. Administering electrolytes above the protocol order due to critically low potassium in a patient experiencing frequent ectopy.	12(22.9)	29(54.7)	5(9.5)	7(13.2)	2	Moderate	I-DI	None	13(24.1)	25(46.3)	10(18.5)	6(11.1)	1	Moderate	D-SD	None
33. Conserving blood waste samples for return to the patient after drawing labs.	6(12.2)	20(40.8)	14(28.6)	9(18.4)	6	None	None	None	6(12.2)	18(36.7)	15(30.6)	10(20.4)	6	None	None	None
34. Rapidly infusing multiple units of blood products on post open heart patient when the physician does not want to return to surgery.	6(17.1)	7(20.0)	11(31.4)	11(31.4)	20	Low	A-VA	None	6(17.1)	8(22.9)	13(37.1)	8(22.9)	20	Low	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
35. Administering multiple units of different blood products simultaneously due to massive bleeding.	1(1.9)	4(7.7)	19(36.5)	28(53.8)	3	High	A-VA	None	0	5(9.6)	20(38.5)	27(51.9)	3	High	A-SA	None
36. Not changing the blood tubing per policy when rapidly administering multiple units during an emergency situation.	3(5.7)	21(39.6)	16(30.2)	13(24.5)	2	None	None	None	3(5.7)	18(34.0)	16(30.2)	16(30.2)	2	Low	A-SA	None
37. Administering blood products via an arterial line when no other access is available.	23(46.9)	21(42.9)	3(6.1)	2(4.1)	6	High	I-DI	None	26(54.2)	15(31.3)	5(10.4)	2(4.2)	7	High	D-SD	None
38. Withdrawing care on a dying patient who is not receiving adequate pain control.	29(55.8)	17(32.7)	3(5.8)	3(5.8)	3	High	I-DI	None	31(58.5)	15(28.3)	3(5.7)	4(7.5)	2	High	D-SD	None
39. Administering extra doses or clinical boluses of pain medications to a dying patient due to signs or symptoms of suffering.	5(9.6)	8(15.4)	19(36.5)	20(38.5)	3	Moderate	A-VA	None	4(7.8)	7(13.7)	22(43.1)	18(35.3)	4	Moderate	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
40. Administering morphine via nebulizer to a dying patient with severe dyspnea without an order.	15(31.3)	27(56.3)	3(6.3)	3(6.3)	7	High	I-DI	None	14(29.2)	27(56.3)	5(10.4)	2(4.2)	7	High	D-SD	None
41. Providing water to a dying patient who has NPO orders.	2(3.9)	8(15.7)	20(39.2)	21(41.2)	4	High	A-VA	None	2(3.8)	5(9.6)	24(46.2)	21(40.4)	3	High	A-SA	None
42. Discontinuing oxygen on a dying patient when “comfort measures” are ordered.	9(18.8)	23(47.9)	7(14.6)	9(18.8)	7	Low	I-DI	None	10(20.4)	24(49)	7(14.3)	8(16.3)	6	Low	D-SD	None
43. Administering fluid boluses or volume expanders, without current orders, for hypotension, low urine output, and/or tachycardia.	8(14.8)	13(24.1)	22(40.7)	11(20.4)	1	Low	A-VA	None	8(15.1)	10(18.9)	29(54.7)	6(11.3)	2	Low	A-SA	None
44. Administering extra doses, above what is ordered, of pain medication for breakthrough pain management.	12(22.2)	28(51.9)	9(16.7)	5(9.3)	1	Moderate	I-DI	None	13(24.1)	24(44.4)	13(24.1)	4(7.4)	1	Low	D-SD	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
45. Giving a sedative/pain medication bolus or more sedative/pain medication than ordered as needed for patient comfort.	11(20.8)	27(50.9)	10(18.9)	5(9.4)	2	Moderate	I-DI	None	12(22.6)	24(45.3)	13(24.5)	4(7.5)	2	Low	D-SD	None
46. Administering partial doses of medications due to prior experience with patient response to the ordered dose.	2(3.6)	13(23.6)	26(47.3)	14(25.5)	0	Moderate	A-VA	None	3(5.5)	9(16.4)	27(49.1)	16(29.1)	0	Moderate	A-SA	None
47. Holding a medication dose when patient's vital signs or lab values are near, but not equal to, the defined parameters ordered for holding the medication.	0	20(39.2)	22(43.1)	9(17.6)	4	Low	A-VA	None	0	15(28.8)	30(57.7)	7(13.5)	3	Moderate	A-SA	None
48. Administering more medication than ordered to match the dose the patient normally takes at home.	15(27.8)	35(64.8)	4(7.4)	0	1	High	I-DI	None	13(24.1)	33(61.1)	5(9.3)	3(5.6)	1	High	D-SD	None
49. Bypassing the electronic medication system in order to administer medications in an emergency situation.	3(5.8)	5(9.6)	17(32.7)	27(51.9)	3	High	A-VA	None	1(1.9)	4(7.5)	16(30.2)	32(60.4)	2	High	A-SA	None

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
50. Not following the insulin protocol due to prior experience leading to hypoglycemic episodes in patients.	5(9.6)	26(50)	13(25)	8(15.4)	3	Low	I-DI	None	4(7.4)	23(42.6)	18(33.3)	9(16.7)	1	None	None	None
51. Adjusting insulin orders due to patient condition or impeding procedures.	3(5.9)	12(23.5)	28(54.9)	8(15.7)	4	Moderate	A-VA	None	3(5.9)	9(17.6)	30(58.8)	9(17.6)	4	Moderate	A-SA	None
52. Initiating and titrating vasoactive medications prior to receiving an order.	9(16.7)	16(29.6)	15(27.8)	14(25.9)	1	None	None	None	6(11.1)	15(27.8)	19(35.2)	14(25.9)	1	Low	A-SA	None
53. Running vasoactive medication drips at higher doses than recommended.	4(7.4)	33(61.1)	13(24.1)	4(7.4)	1	Moderate	I-DI	None	5(9.4)	28(52.8)	16(30.2)	4(7.5)	2	Low	D-SD	None
54. Bending visitation policy to accommodate who could visit, how many visitors, and/or for how long.	0	7(13)	21(38.9)	26(48.1)	1	High	A-VA	None	2(3.8)	2(3.8)	22(41.5)	27(50.9)	2	High	A-SA	None
55. Limiting visitation hours.	9(17.3)	12(23.1)	16(30.8)	15(28.8)	3	None	None	None	9(17)	14(26.4)	16(30.2)	14(26.4)	2	None	None	None
56. Allowing pet visitation.	2(4.1)	3(6.1)	29(59.2)	15(30.6)	6	High	A-VA	None	4(8.2)	2(4.1)	30(61.2)	13(26.5)	6	High	A-SA	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
57. I cannot recall a time when the care I delivered for a patient was not totally in line with standard practice guidelines, protocols, orders or instructions.	13(24.1)	25(46.3)	13(24.1)	3(5.6)	1	Moderate	U-DU	None	14(25.9)	27(50)	11(20.4)	2(3.7)	1	Moderate	D-SD	None
58. Much of my practice is covered by standing protocols.	1(1.9)	5(9.3)	31(57.4)	17(31.5)	1	High	R-VR	None	3(5.6)	4(7.4)	30(55.6)	17(31.5)	1	High	A-SA	None
59. I always consult a physician for a specific order if there is a question about patient care.	1(1.9)	5(9.3)	25(46.3)	23(42.6)	1	High	R-VR	None	2(3.6)	9(16.4)	22(40.0)	22(40.0)	0	High	A-SA	None
60. I do not move outside the margins of the scope of practice for nursing.	4(7.7)	13(25)	22(42.3)	13(25.0)	3	Low	R-VR	None	4(7.7)	16(30.8)	23(44.2)	9(17.3)	3	Low	A-SA	None
61. I treat the patient as needed and receive orders at a later time.	5(10.0)	16(32.0)	25(50.0)	4(8.0)	5	Low	R-VR	None	5(10.2)	19(38.8)	21(42.9)	4(8.2)	6	None	None	None
62. I write my own orders to cover what is needed for patient care at the time and inform the physician later.	16(29.6)	23(42.6)	12(22.2)	3(5.6)	1	Moderate	U-DU	None	15(27.8)	21(38.9)	16(29.6)	2(3.7)	1	Low	D-SD	None

Appendix G (Continued)

Round 2 Result (N=55)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**	**1**	**2**	**3**	**4**	**NJ**	**Consensus**	**Direction**	**Polarity**
63. I adapt care to the specific situation and/or needs of the patient when no clear guidelines are available.	0	5(7.3)	35(64.8)	14(25.9)	1	High	R-VR	None	0	4(7.4)	34(63)	16(29.6)	1	High	A-SA	None
64. I step outside the scope of nursing practice.	10(20.4)	24(49)	13(26.5)	2(4.1)	6	Low	U-DU	None	10(20.4)	23(46.9)	13(26.5)	3(6.1)	6	Low	D-SD	None
65. I do whatever is necessary to provide emergent care to a patient when faced with inconsistency or lack of direction.	0	11(21.2)	24(46.2)	17(32.7)	3	Moderate	R-VR	None	0	10(18.9)	26(49.1)	17(32.1)	2	High	A-SA	None
66. There are times when I have changed my own practice prior to an accepted change in standard practice.	0	3(6.3)	35(72.9)	10(20.8)	7	High	R	None	0	4(8.2)	34(69.4)	11(22.4)	6	High	A-SA	None
67. At times I provide care in situations where there are no clear guidelines or policies in place.	0	5(9.4)	32(60.4)	16(30.2)	2	High	R-VR	None	0	5(9.3)	34(63)	15(27.8)	1	High	A-SA	None

Appendix H: Round Three Results

Round 3 Results (N=34)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
1. Using hyperventilation as necessary to keep a patient's intercranial pressure manageable until a physician could arrive.	1(3.3)	7(23.3)	15(50.0)	7(23.3)	4	Moderate	A-VA	None	0(0)	9(29.0)	16(51.6)	6(19.4)	3	Moderate	A-SA	None
2. Lowering the head of a patient's bed, despite ventilator bundle protocol to the contrary, during hypotensive episodes.	1(2.9)	7(20.6)	16(47.1)	10(29.4)	0	Moderate	A-VA	None	0(0)	7(20.6)	15(44.1)	12(35.3)	0	Moderate	A-SA	None
3. Advancing a patient's diet beyond what is ordered while monitoring patient's tolerance.	2(5.9)	17(50.0)	11(32.4)	4(11.8)	0	Low	A	None	4(12.1)	10(30.3)	12(36.4)	7(21.2)	1	None	None	None

Appendix H (Continued)

Round 3 Results (N=34)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
4. Writing orders to administer sedatives and pull a femoral sheath on a combative patient scheduled for open heart surgery in the morning, in order to prevent injury, when a physician hung up the phone after stating “do whatever you have to do to make it through the night and do not call me again".	18(54.5)	13(39.4)	2(6.1)	0(0)	1	High	DI-I	None	18(52.9)	11(32.4)	5(14.7)	0(0)	0	High	SD-D	None
5. Setting up abdominal pressure monitoring after reading about the procedure on line due to lack of available hospital guidelines or policy due to surgeon’s insistence for the monitoring.	0(0)	6(18.2)	19(57.6)	8(24.2)	1	High	A-VA	None	0(0)	6(17.6)	19(55.9)	9(26.5)	0	High	A-SA	None

Appendix H (Continued)

Round 3 Results (N=34)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
6. Rapidly infusing three liters of warmed fluids to a diabetic ketoacidosis patient weighing 70 kilograms with a body temperature of 98 degrees in the absence of a facility policy or protocol.	3(10.3)	23(79.3)	2(6.9)	1(3.4)	5	High	I-DI	None	4(13.8)	22(75.9)	2(6.9)	1(3.4)	5	High	D-SD	None
7. Not completing the pre-operative checklist prior to sending a patient to the operating room.	12(38.7)	18(58.1)	1(3.2)	0(0)	3	High	I-DI	None	16(53.3)	13(43.3)	1(3.3)	0(0)	4	High	D-SD	None
8. Performing bedside abdominal washouts despite a protocol to perform this procedure in the operating room.	19(67.9)	5(17.9)	3(10.7)	1(3.6)	6	High	I-DI	None	12(51.9)	10(37.0)	2(7.4)	1(3.7)	7	High	D-SD	None
9. Increasing the FiO2 on a ventilated patient due to patient condition without orders to do so.	1(2.9)	1(2.9)	11(32.4)	21(61.8)	0	High	A-VA	None	1(2.9)	1(2.9)	11(32.4)	21(61.8)	0	High	A-SA	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
10. Bagging a patient at a faster than recommended rate during a code situation in order to improve oxygen saturation.	8(23.5)	16(47.1)	7(20.6)	3(8.8)	0	Moderate	I-DA	None	8(23.5)	16(47.1)	7(20.6)	3(8.8)	0	Moderate	D-SD	None
11. Holding the tube feeding on a critically ill patient without orders to hold the feeding.	3(10.3)	3(10.3)	18(62.1)	5(17.2)	5	Moderate	A-AV	None	1(3.4)	6(20.7)	18(62.1)	4(13.8)	5	Moderate	A-SA	None
12. Not following standard guidelines during emergent insertion of central lines.	3(9.1)	25(75.8)	4(12.1)	1(3.0)	1	High	I-DI	None	6(18.2)	21(63.6)	5(15.2)	1(3.0)	1	High	D-SD	None
13. Transferring a patient from critical care that did not meet the physician ordered minimum systolic blood pressure parameters.	5(16.1)	26(83.9)	0(0)	0(0)	3	High	I	None	5(15.9)	26(81.3)	1(3.1)	0(0)	2	High	D	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
14. Administering tPA (tissue plasminogen activator) or thrombolytic therapy beyond the accepted window of time.	4(11.8)	23(67.6)	7(20.6)	0(0)	0	Moderate	I-DI	None	4(12.9)	21(67.7)	6(19.4)	0(0)	3	High	D-SD	None
15. Fashioning a rectal tube using a nasal trumpet and a Foley bag in order to protect the skin of a patient with continuous loose stool.	7(21.2)	12(36.4)	11(33.3)	3(9.1)	1	None	None	None	9(27.3)	11(33.3)	11(33.3)	2(6.1)	1	Low	D-SD	None
16. Not discontinuing a Foley catheter, per orders, for an incontinent, obese patient with excoriated skin.	1(3.2)	8(25.8)	20(64.5)	2(6.5)	3	Low	A	None	1(3.2)	3(9.7)	23(74.2)	4(12.9)	3	High	A-SA	None
17. Removing a Foley catheter prior to receiving orders.	1(3.3)	7(23.3)	18(60.0)	4(13.3)	4	Moderate	A-VA	None	1(3.2)	8(25.8)	18(58.1)	4(12.9)	3	Moderate	A-SA	None

Appendix H (Continued)

Round 3 Results (N=34)	Responses to appropriateness/reasonability scale n (%) (1) DI=Definitely Inappropriate, DU= Definitely Unreasonable; (2)I=Inappropriate, U=Unreasonable; (3)A=Appropriate, R=Reasonable; (4)VA=Very Appropriate, VR=Very Reasonable NJ= No Judgment								Responses to agreeability scale n (%) (1) SD=Strongly Disagree; (2)D=Disagree ; (3)A=Agree; (4)SA=Strongly Agree NJ=No Judgment							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
18. Sending a patient, who must return the next day for a treatment or procedure, home with IV access due to difficulty and/or patient discomfort with initiating intravenous access.	8(25.0)	18(56.3)	5(15.6)	1(3.1)	2	High	I-DI	None	8(23.5)	18(52.9)	7(20.6)	1(2.9)	0	Moderate	D-SD	None
19. Breaking in-line suction to lavage, bag, and suction a ventilated patient in respiratory distress.	4(11.8)	7(20.6)	19(55.9)	4(11.8)	0	Low	A-VA	None	4(11.8)	5(14.7)	21(61.8)	4(11.8)	0	Moderate	A-SA	None
20. Using saline to lavage an intubated patient in order to stimulate a cough to expel a plug or thick secretions.	7(21.9)	4(12.5)	20(62.5)	1(3.1)	2	Moderate	A	None	7(21.9)	4(12.5)	19(59.4)	2(6.3)	2	Low	A-SA	None
21. Suctioning a blood clot out of a mediastinal chest tube to prevent cardiac tamponade.	2(8.7)	11(47.8)	9(39.1)	1(4.3)	11	None	None	None	2(8.7)	6(26.1)	24(60.9)	1(4.3)	11	Moderate	A	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
22. Not applying ordered SCDs (sequential compression devices) due to patient safety concerns in an ambulatory patient.	1(3.1)	7(21.9)	22(68.8)	2(6.3)	2	Moderate	A-VA	None	1(3.1)	7(21.9)	23(71.9)	1(3.1)	2	High	A	None
23. Not maintaining sterile technique when inserting a catheter during an emergency or code situation.	3(9.1)	24(72.7)	5(15.2)	1(3.0)	1	High	I-DI	None	4(12.1)	23(69.7)	8(18.2)	0(0)	1	High	D-SD	None
24. Administering ice chips to a patient on a ventilator.	2(6.3)	22(68.8)	8(25.0)	0(0)	2	Moderate	I-DI	None	3(9.1)	22(66.7)	7(21.2)	1(3.0)	1	Moderate	D-SD	None
25. Turning a hemodynamically unstable patient in order to increase mobility.	1(3.2)	18(58.1)	7(22.6)	5(16.1)	3	Low	I-DI	None	1(3.2)	16(51.2)	10(32.3)	4(12.9)	3	Low	D	None
26. Not turning a patient due to lack of hemodynamic stability.	1(3.0)	26(78.8)	4(12.1)	2(6.1)	1	High	I-DI	None	1(3.0)	26(78.8)	4(12.1)	2(6.1)	1	High	D-SD	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
27. Assisting a patient to increase mobility prior to a physician order.	1(2.9)	6(17.6)	23(67.6)	4(11.8)	0	Moderate	A-VA	None	1(3.0)	3(9.1)	25(75.8)	4(12.1)	1	High	A-SA	None
28. Waiting to recheck lab values until the next morning, despite an electrolyte protocol requiring more frequent assessment of values.	6(17.6)	24(70.6)	2(5.9)	0(0)	0	High	I-DI	None	7(20.6)	24(70.6)	3(8.8)	0(0)	0	High	D-SD	None
29. Ordering labs prior to contacting a physician.	0(0)	7(24.1)	20(69.0)	2(6.9)	5	Moderate	A-VA	None	0(0)	6(19.4)	22(71.0)	3(9.7)	3	High	A	None
30. Using blood glucose readings obtained from a finger-stick interchangeably with serum level glucose readings.	2(6.3)	5(15.6)	25(78.1)	0(0)	2	High	A	None	2(6.3)	5(15.6)	25(78.1)	0(0)	2	High	A	None
31. Skipping ordered lab draws due to frequency and slow turn-around time between draws for results.	4(12.1)	22(66.7)	7(21.2)	0(0)	1	Moderate	I-DI	None	3(9.1)	23(69.7)	6(18.2)	1(3.0)	1	Moderate	D-SD	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
32. Administering electrolytes above the protocol order due to critically low potassium in a patient experiencing frequent ectopy.	3(9.1)	29(87.9)	1(3.0)	0(0)	1	High	I	None	4(12.1)	28(84.8)	1(3.0)	0(0)	1	High	D	None
33. Conserving blood waste samples for return to the patient after drawing labs.	3(10.1)	16(53.3)	9(30.0)	2(6.7)	4	Low	I	None	3(10.1)	16(53.3)	9(30.0)	2(6.7)	4	Low	D	None
34. Rapidly infusing multiple units of blood products on post open heart patient when the physician does not want to return to surgery.	2(10.5)	4(21.1)	10(52.6)	3(15.8)	15	Low	A-VA	None	3(15.0)	3(15.0)	13(65.0)	1(5.0)	14	Moderate	A	None
35. Administering multiple units of different blood products simultaneously due to massive bleeding.	1(3.0)	1(3.0)	8(24.2)	23(69.7)	1	High	A-VA	None	0(0)	2(6.1)	9(27.3)	22(66.7)	1	High	A-SA	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
36. Not changing the blood tubing per policy when rapidly administering multiple units during an emergency situation.	1(2.9)	24(70.6)	6(17.6)	3(8.8)	0	High	I	None	2(6.1)	22(66.7)	6(18.2)	3(9.1)	1	Moderate	D	None
37. Administering blood products via an arterial line when no other access is available.	22(73.3)	(5)16.7)	1(3.3)	2(6.7)	4	High	DI	None	32(72.4)	5(17.2)	2(6.9)	1(3.4)	5	High	SD	None
38. Withdrawing care on a dying patient who is not receiving adequate pain control.	25(73.5)	6(17.6)	3(8.8)	0(0)	0	High	DI	None	27(79.4)	4(11.8)	3(8.8)	0(0)	0	High	SD	None
39. Administering extra doses or clinical boluses of pain medications to a dying patient due to signs or symptoms of suffering.	1(3.0)	3(9.1)	11(33.3)	18(54.5)	1	High	A-VA	None	1(3.0)	2(6.1)	20(60.6)	10(30.3)	1	High	A-SA	None

Appendix H (Continued)

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
40. Administering morphine via nebulizer to a dying patient with severe dyspnea without an order.	7(21.9)	23(71.9)	1(3.1)	1(3.1)	2	High	I	None	5(16.1)	24(77.4)	1(3.2)	1(3.2)	3	High	D	None
41. Providing water to a dying patient who has NPO orders.	0(0)	5(16.1)	10(32.3)	16(51.6)	3	High	A-VA	None	0(0)	3(9.4)	20(62.5)	9(28.1)	2	High	A-SA	None
42. Discontinuing oxygen on a dying patient when "comfort measures" are ordered.	3(9.7)	19(61.3)	6(19.4)	3(9.7)	3	Moderate	I-DI	None	4(12.9)	19(61.3)	6(19.4)	2(6.5)	3	Moderate	D-SD	None
43. Administering fluid boluses or volume expanders, without current orders, for hypotension, low urine output, and/or tachycardia.	4(11.8)	9(26.5)	19(55.9)	2(5.9)	0	Low	A-VA	None	3(8.8)	6(17.6)	24(70.6)	1(2.9)	0	High	A	None
44. Administering extra doses, above what is ordered, of pain medication for breakthrough pain management.	2(5.9)	26(76.5)	4(11.8)	2(5.9)	0	High	I	None	4(12.1)	24(72.7)	4(12.1)	1(3.0)	1	High	D	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
45. Giving a sedative/pain medication bolus or more sedative/pain medication than ordered as needed for patient comfort.	3(8.8)	26(76.5)	3(8.8)	2(5.9)	0	High	I	None	4(11.8)	25(73.5)	4(11.8)	1(2.9)	0	High	D	None
46. Administering partial doses of medications due to prior experience with patient response to the ordered dose.	1(3.0)	4(12.1)	26(78.8)	2(6.1)	1	High	A	None	1(3.0)	4(12.1)	25(75.8)	3(9.1)	1	High	A	None
47. Holding a medication dose when patient's vital signs or lab values are near, but not equal to, the defined parameters ordered for holding the medication.	1(3.0)	5(15.2)	23(69.7)	4(12.1)	1	Moderate	A-VA	None	1(3.0)	4(12.1)	25(75.8)	3(9.1)	1	High	A	None
48. Administering more medication than ordered to match the dose the patient normally takes at home.	7(20.6)	26(76.5)	1(2.9)	0(0)	0	High	I	None	7(20.6)	25(73.5)	2(5.9)	0(0)	0	High	D	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
49. Bypassing the electronic medication system in order to administer medications in an emergency situation.	1(3.0)	1(3.0)	12(36.4)	19(57.6)	1	High	A-VA	None	0(0)	1(3.0)	12(36.4)	20(60.6)	1	High	A-SA	None
50. Not following the insulin protocol due to prior experience leading to hypoglycemic episodes in patients.	3(9.1)	22(66.7)	7(21.2)	1(3.0)	1	Moderate	I-DI	None	2(6.1)	24(72.7)	5(15.2)	2(6.1)	1	High	A	None
51. Adjusting insulin orders due to patient condition or impeding procedures.	1(3.0)	10(30.3)	20(60.6)	2(6.1)	1	Low	A	None	2(6.1)	8(24.2)	21(63.6)	2(6.1)	1	Low	A	None
52. Initiating and titrating vasoactive medications prior to receiving an order.	3(8.8)	20(58.8)	8(23.5)	3(8.8)	0	Low	I-DI	None	2(5.9)	10(29.4)	19(55.9)	3(8.8)	0	Low	A-SA	None
53. Running vasoactive medication drips at higher doses than recommended.	2(5.9)	27(79.4)	3(8.8)	2(5.9)	0	High	I	None	3(8.8)	24(70.6)	5(14.7)	2(5.9)	0	High	D	None

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
54. Bending visitation policy to accommodate who could visit, how many visitors, and/or for how long.	0(0)	4(12.1)	10(30.3)	19(57.6)	1	High	A-VA	None	1(2.9)	0(0)	12(37.5)	19(59.4)	2	High	A-SA	None
55. Limiting visitation hours.	2(5.9)	7(20.6)	21(61.8)	4(11.8)	0	Moderate	A-VA	None	3(8.8)	6(17.6)	20(58.8)	5(14.7)	0	Moderate	A-SA	None
56. Allowing pet visitation.	0(0)	1(2.9)	26(81.3)	5(15.6)	2	High	A	None	1(3.1)	1(3.1)	25(78.1)	5(15.6)	2	High	A	None
57. I cannot recall a time when the care I delivered for a patient was not totally in line with standard practice guidelines, protocols, orders or instructions.	4(11.8)	25(73.5)	4(11.8)	1(2.9)	0	High	U	None	4(11.8)	27(79.4)	2(5.9)	1(2.9)	0	High	D	None
58. Much of my practice is covered by standing protocols.	0(0)	2(6.1)	26(78.8)	5(15.2)	1	High	R	None	1(3.0)	2(6.1)	26(78.8)	4(12.1)	1	High	A	None

Appendix H (Continued)

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
59. I always consult a physician for a specific order if there is a question about patient care.	0(0)	1(2.9)	25(73.5)	8(23.5)	0	High	R	None	0(0)	4(12.1)	21(63.6)	8(24.2)	1	High	A-SA	None
60. I do not move outside the margins of the scope of practice for nursing.	0(0)	4(12.1)	24(72.7)	5(15.2)	1	High	R	None	0(0)	5(15.2)	24(72.7)	4(12.1)	1	High	A	None
61. I treat the patient as needed and receive orders at a later time.	2(6.3)	11(34.4)	19(59.4)	0(0)	2	Low	R	None	2(6.5)	11(35.5)	18(58.1)	0(0)	3	Low	A	None
62. I write my own orders to cover what is needed for patient care at the time and inform the physician later.	6(18.2)	22(66.7)	5(15.2)	0(0)	1	High	U-DU	None	6(18.2)	19(57.6)	7(21.2)	1(3.0)	1	Moderate	D-SD	None
63. adapt care to the specific situation and/or needs of the patient when no clear guidelines are available.	0(0)	1(2.9)	31(91.2)	2(5.9)	0	High	R	None	0(0)	0(0)	31(91.2)	3(8.8)	0	High	A	None

Appendix H (Continued)

Round 3 Results (N=34)	**Responses to appropriateness/reasonability scale n (%)** **(1) DI=Definitely Inappropriate, DU= Definitely Unreasonable;** **(2)I=Inappropriate, U=Unreasonable;** **(3)A=Appropriate, R=Reasonable;** **(4)VA=Very Appropriate, VR=Very Reasonable** **NJ= No Judgment**								**Responses to agreeability scale n (%)** **(1) SD=Strongly Disagree;** **(2)D=Disagree ;** **(3)A=Agree;** **(4)SA=Strongly Agree** **NJ=No Judgment**							
	1	2	3	4	NJ	Consensus	Direction	Polarity	1	2	3	4	NJ	Consensus	Direction	Polarity
64. I step outside the scope of nursing practice.	4(12.1)	24(72.7)	5(15.2)	0(0)	1	High	U	None	5(14.7)	22(68.8)	5(15.6)	0(0)	2	High	D-SD	None
65. I do whatever is necessary to provide emergent care to a patient when faced with inconsistency or lack of direction.	0(0)	2(6.1)	30(90.9)	1(3.0)	1	High	R	None	0(0)	1(3.0)	29(87.9)	3(9.1)	1	High	A	None
66. There are times when I have changed my own practice prior to an accepted change in standard practice.	0(0)	0(0)	28(84.8)	5(15.2)	1	High	R	None	0(0)	0(0)	28(84.8)	5(15.2)	1	High	A	None
67. At times I provide care in situations where there are no clear guidelines or policies in place.	0(0)	0(0)	28(84.8)	5(15.2)	1	High	R	None	0(0)	0(0)	28(84.8)	5(15.2)	1	High	A	None

Appendix I: Biographical Sketch

NAME Jodie Gary	POSITION TITLE Doctoral Candidate, University of Texas at Tyler Assistant Professor in the College of Nursing at the Texas A&M Health Science Center, Bryan, Texas
eRA COMMONS USER NAME (credential, e.g., agency login)	

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	MM/YY	FIELD OF STUDY
Texas A&M University	BS	08/96	Psychology
Blinn College in Bryan, Texas	AD	05/01	Nursing
University of Phoenix	BS	07/06	Nursing
University of Phoenix	MS	12/07	Nursing
University of Texas at Tyler	PhD	05/12	Nursing

A. Personal Statement

The goal of the proposed research is to investigate the care provided by critical care nurses in the absence of guidelines that enable patient-centered care. I have the expertise, leadership and motivation necessary to successfully carry out the proposed work. I have a background in emergency care and telemetry and critical care nursing. As a doctoral student at University of Texas at Tyler, I laid the groundwork for the proposed research by outlining the defining attributes to the use of positive deviance in nursing through concept analysis.

B. Positions and Honors

Positions and Employment

2008-Present	Assistant Professor, College of Nursing, Texas A&M Health Science Center, Bryan, TX
2003-2010	Registered Nurse, Staff Nurse and Charge Nurse, Critical Care Unit, St. Joseph Regional Health Center, Bryan, TX
2001-2003	Registered Nurse, Staff Nurse and Charge Nurse, Telemetry Unit, St. Joseph Regional Health Center, Bryan, TX

1999-2000	Podiatry Assistant, Scott and White Health Clinic, College Station, TX
1997-1999	Research Assistant, Texas A&M Dept. of Psychology, Behavioral Neuroscience Lab, College Station, TX
1996-1998	Paramedic, Texas Emergency Medical Ambulance Service, Bryan, TX
1995-1997	Medic Supervisor, Texas A&M Dept. of Recreational Sports, College Station, TX
1993-1996	Volunteer Medic for ALS ambulance service, Texas A&M EMS, College Station, TX
1990-1992	Volunteer Medic and Fire Personnel, Westlake Volunteer Fire Department, Austin, TX

Professional Memberships

2009-	Sigma Theta Tau
2008-	Texas Nurses Association
2008-	American Nurses Association
2008-	National League for Nurses
2006-	American Association of Critical Care Nurses

Honors

2007	St. Joseph Regional Health Center Team Member of the Quarter, Third Quarter
2007	St. Joseph Health System Values in Action Award

C. Posters in Conference Proceedings

Gary, J., Bentley, R. (2009). The essential of safety in the clinical setting. Summer Institute on Evidence-Based Practice, San Antonio, TX.

Moreland, J., **Gary, J.,** & Matzke, B. (2009). Baccalaureate nursing students first foray into leadership. American Association of Colleges of Nursing Baccalaureate Education Conference, Chicago, IL.