#### **ABSTRACT**

Nursing Intuition and Perceptions of Physiological Decline:

A Qualitative Descriptive Study of Intuitive Care Giving in Critical Care Nurses

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Aesthetic knowing in nursing has been defined by nurse scholars as intuition or a perceptive comprehension of patient experience or condition. How nurses describe their experiences with intuition in providing care for critically ill patients who are unable to verbally or consciously communicate was of particular interest. The specific aims of this study were to: 1) describe critical care nurses experiences of intuition in anticipation of acute physiologic decline, 2) describe critical care nurses' integration of intuition and scientific knowledge in making clinical decisions for patients, and 3) describe critical care nurses' experiences with communicating intuitive findings to health care personnel. The data analysis and thematic interpretation, a process of intuitive nursing care was identified. The three main themes that emerged were 1) Recognizing that something is not right, 2) Gathering the evidence, and 3) Communicating and advocating. Nurse participants in this study communicated a strong relationship between intuitive caregiving with improved patient outcomes. The participants also expressed a culture of collaboration among co-workers as facilitative of developing and trusting intuitive caregiving skills. A thematic 'tool kit' was developed which may serve as an educational model to promote nursing intuition. Future research will help to refine, implement, and test the tool kit for effectiveness in developing intuitive caregiving skills.

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# NURSING INTUITION AND PERCEPTIONS OF PHYSIOLOGICAL DECLINE: A QUALITATIVE DESCRIPTIVE STUDY OF INTUITIVE CARE GIVING IN CRITICAL CARE NURSES

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#### CHAPTER ONE

#### Introduction

Care of the acutely ill patient is an intensely interpersonal endeavor (Tanner, Benner & Chesla, 1993). Though nurses collect clinical data about patients, they also form judgments of behavior, demeanor, and affect. Often called "knowing the patient", nurses form perceptions within the context of a given clinical encounter (Tanner, Benner & Chesla, 1993, pg.274). These perceptions are composites of both the objective data and subjective observations, and provide a more replete basis for evaluating patient status from moment to moment. More broadly, this type of knowing is based on intuition.

Intuitive observations are derived from aesthetic knowledge that, along with quantitative metric data, is an essential component of nursing practice (Benner & Tanner, 1987; Carper, 1978; Chinn & Kramer, 2008). Often, an intuitive sense or gut feeling about a patient's status guides the nurse in the critical care setting to systematically seek further empiric and qualitative data to make clinical decisions about the plan of care.

The author's purpose for this study was to explore nurses' intuitive caregiving experiences in the care of critically ill patients experiencing acute physiologic decline. Of particular interest was to learn how nurses apply intuitive perception in clinical decision making and communication between providers. Practical action informed by intuitive awareness is related to the larger concept of aesthetic knowing, described by Barbara Carper (1978), "The more skilled the nurse becomes in perceiving and empathizing with the lives of others, the more knowledge or understanding will be gained...the nurse will

thereby have available a larger repertoire of choices in designing and providing nursing care that is effective and satisfying," (p. 27).

#### CHAPTER TWO

#### Review of Literature

Unique from other seriously ill clients, patients treated in the intensive care environment are often faced with invasive interventions that limit overt expression and communication (Cox, James & Hunt, 2006). Examples of such interventions include intubation and ventilation, sedation, and pharmacotherapy for pain. In the absence of speech or intentional nonverbal communication, the nurse must observe subtle variations in patient appearance and behavior. Nonverbal vocalizations and alterations in breathing pattern may also be observed. Identifying and tracking these subtleties may identify changes in patient status before empiric measures change (Minick and Harvey, 2003). Ominous departures from baseline patterns of behavior can also be an early herald of physiologic decline (Pyles & Noerager, 1983). An excerpt from interviews performed in Minick and Harvey's study illuminates how careful observation can indicate decline before empiric measures:

(The patient) had a fever, but he just was starting to get a little confused and not acting like himself. We did (arterial blood gases), and the results really didn't look bad. He just didn't act himself, and I told the doctor...I have a feeling he's going to "go South" tonight. (p. 295)

While practicing the art of knowing the patient in the context of illness is ubiquitous in nursing, it is a phenomenon that can seldom be adequately described or elucidated (Thorne, 2000). A nurse in Thorne's study explains:

It's something...hard to describe, but I find with most patients, I feel like I get to know them differently than when they're normal, I'm sure. There's some sense of who this person is. It's when you touch them, what happens on the monitors...or how they look, even when they're paralyzed, just whether their features look a little different. (p. 207)

Communication with other clinicians about seemingly vague changes in the patient can lead to lack of or a delay in intervention (Smith, 1988). However, addressing these changes early can have profound positive impact on patient outcomes (Pyles & Noerager, 1983). A nurse that participated in Pyles and Noerager's research relayed a story of a patient who spontaneously arrested and died following a gradual decline throughout her shift. The physicians did not put stock in the intuitive report of the nurse. This nurse explains:

There are some doctors-your purely scientific, numbers men- who don't trust the nurse's intuition. They'll ask, "What are the numbers?" The respiration, urinary output, blood pressure, invasive readings- those are your numbers. (p. 54)

Additionally, intuitive perceptions are often an acquired aesthetic form of knowing that may be cultivated outside of a traditional empirically-oriented classroom (Pyles & Noerager, 1983; Rew, 1990). The 'neophyte' nurse in the critical care setting may be encouraged and counseled by a more experienced mentor in the clinical environment (Pyles & Noerager, 1983). This may serve to train new nurses to observe and become aware of cues and patterns distinct to the population of patients at hand. A strong clinical mentor can advance the ability of the new nurse to identify manifestations of decline in patients and differentiate between ominous and non-emergent presentations in patients, which can advance into more complex 'gut feelings' and intuitive perceptions (Pyles & Noerager, 1983).

Difficulty in communicating nurse perceptions of decline in patient status has been a problem identified in the literature (Minick & Harvey, 2003; Pyles & Noerager, 1983).

The evaluative viewpoints of the nurse and the physician can be disparate, as the perspective of the nurse is inclined toward the aesthetic, while that of the physician tends

to focus on quantifiable measures. Extrinsic and intrinsic barriers such as lack of validation of intuitive observations by peers, a low perception of self-efficacy, and absence of nurse-initiated facility protocols, such as nurse initiated serum studies, can all inhibit effective communication and timely intervention in the case of an acutely declining patient (Rew, 1990, p. 36).

As evidenced in the literature, nursing intuition regarding physiologic decline has demonstrated clinical and phenomenological gravitas. Most research literature about this topic is more than a decade old, and this area of nursing research has waned in recent years. Further research and description of nursing perceptions in the care of acutely declining patients will help contribute to a better understanding of the phenomena of nursing intuition, and foster an environment of interdisciplinary collaboration regarding assessment and communication, validate nurse perceptions, strengthen nursing education and preceptorship models, and improve patient outcomes.

#### CHAPTER THREE

#### Methods

The authors of this study followed a qualitative descriptive study design. Interviews were conducted with six critical care nurses recruited from a large metropolitan hospital in the Southwestern United States. The interview consisted of questions that included demographic information and investigative questions designed to elicit descriptive data about the participant's experiences (Table 1 & 2). The investigators also asked participants to self-identify themselves using the Benner's Stages of Clinical Competence (Benner & Tanner, 1987). Benner's Stages of Clinical Competence are presented in Table 3. Expert nurses, aside from having a breadth of experiences upon which to reflect, have often formed strong intuitive perception models, and may utilize these more often than a new nurse (Payne, 2012). Self-identification of clinical competence stage was important to data collection since no concrete criterion exists in nursing practice that can adequately indicate expertise, and because self-perception and reasoning behind expertise represented a vital element of intuitive and experiential disclosure.

The interviews began with the question, "Tell me about a time when you cared for a patient who declined precipitously." The remainder of the questions were asked in a semi-structured style, so as to allow participants to extemporize and share further details. The investigators also utilized extemporary questions pertinent to the responses of participants in order to draw out descriptions of the phenomenon, and gain further insight and clarity into nuance that a participant may have contributed. At the conclusion of the interview, the investigators allowed the participant to ask any further questions regarding

the interview questions, and to contribute or clarify further any aspect of the interview.

The authors gave a summary of the participant responses and asked the participants if the summary was accurate, and invited the participant to correct or add any further information

Observations of non-verbal behaviors of the participants were recorded in writing during and after the interview. The principal investigator and student investigator debriefed after each interview to review observations and reflect on the interview proceedings. The student investigator observed a subset of nurse participants in the clinical setting and recorded observations of intuitive nurse behaviors. The student investigator kept a methodological and reflexive journal to record the objective occurrences and subjective reflections of the study.

Institutional Review Board approval for the study was obtained by the hospital that employed the participant nurses and by the university sponsoring the study. Nurse participants were sought through direct electronic mail solicitation by the student investigator. Appointments for interview were made with individual nurses and were conducted by the principal investigator and a student investigator. The student investigator was trained by the principal investigator using sample interviews so that each interview would be conducted in a consistent fashion. All interviews were held in a private room on a university campus near the hospital. Prior to the commencement of the interview, the investigators gave a brief explanation of the intent and purpose of the study, as well as the perceived risks and benefits. A copy of the informed consent was given to each participant. Participants were given time to read the consent and ask

questions. A signed copy of the consent was obtained prior to each interview. Participants received a \$25 gift card in appreciation of their participation.

All interviews were digitally audio recorded and sent for transcription via a private transcription agency. All proper nouns were replaced with nondescript nouns to protect the confidentiality of the participants; for example, the participant's colleague, "Sarah," was replaced with "colleague." Audio files of interviews were deleted after the transcripts were received and reviewed. Transcripts were compiled and imported to the analytical software program NVivo version 10 for analysis (QSR International, 2014). Transcripts were maintained on a password-protected computer with no identifying information in the files or file names.

#### Data Analysis

The inductive, qualitative content analysis process outlined by Graneheim and Lundman (2003) was used to analyze the data and formulate a comprehensive description of critical care nurses experiences of intuition in anticipation of acute physiologic decline. The units of analysis were the transcripts of the interviews, the written observations of the interviews, and the written observations of nurse intuitive behavior. Once the transcripts were imported into Nvivo 10 (QSR International, 2014), they were read through by both the principal and student investigators to get a general overview of the data. Meaning units, or codes, were identified within the transcripts and observations. The meaning units were then abstracted into categories, which were then organized into themes. Although the coding sequence is hierarchical in nature, the analysis process was a constant iterative, reflexive process where the relationships between codes, categories, and themes were evaluated and re-evaluated after each interview.

#### CHAPTER FOUR

#### Results

Of six participants, three were male and three were female. The average number of years of critical care experience that the participants had was 11.5 years. All participants possessed a bachelor's degree in nursing science. Five of six participants worked primarily with adult patients with traumatic injuries and surgical needs, while one participant worked mainly with end-stage organ failure and adult solid organ transplant. Evidence of data saturation began to emerge in the third and fourth interviews. Two additional interviews were conducted to verify that no new ideas or concepts were discussed. The relative ease and early identification of data saturation was likely due to all nurses working on the same unit in the hospital and treating patients with similar conditions and diagnoses. A distinct culture of care emerged from the interviews with the nurses that seemed to facilitate intuitive caregiving. In review, five major themes emerged from the interviews: recognition of initial decline, gathering further assessment data and support, fear and mentorship, rapid nurse-initiated intervention, and nurse-physician communication.

#### Recognition of initial decline

In response to the first item on the instrument, the majority of the nurses described the acute decompensation of a patient experiencing cardiopulmonary distress, such as pulmonary embolism, myocardial infarction, and fatal arrhythmias. Some accounts also described patients experiencing more gradual, but nonetheless life-threatening, variances in acid-base balance and fluctuations in serum electrolyte levels.

Of the recurring descriptors used to discuss cues that nurses' picked up on when forming intuitive perceptions of patient's physiologic decline, four main categories emerged: patient appearance or affect, breathing pattern, mentation, and the expression of the eyes. In all of the interviews, at least one of these four patient presentations was discussed. Appearance and affect descriptions ranged from vague alterations to unmistakable deviations from baseline. Often, nurses described early signals as being distinct but slight. One nurse said that they were alerted to an ominous change in the patient's status by overall skin coloration. "I don't know exactly, his color changed a little bit," they explained. This minor change began a process of further investigation by the nurse to discover an underlying hemodynamic problem with the patient. In contrast, another nurse watched their patient rapidly become pallorous and cyanotic above the midcostal margin; a sure sign heralding pulmonary embolism. Nurses also referred a great deal to the appearance of the eyes as an indicator of status. "It was just a look, the sparkle. I don't know how to explain it," described one nurse. Assessment of the eyes, beyond neurological indicators, gave nurses insight into patient's alertness, consciousness, and per one nurse's report, whether they were, "at home or not."

Breathing pattern was observed by three of the nurses, and was primarily regarded as an indicator of impending acidosis. In the case of a patient with end-stage renal disease and respiratory failure, a nurse described a kind of, "guppy breathing" where the patient would take deep puffing breaths over the preset number of breaths programmed on the ventilator. The nurse had related this observation as an indication of severe acidosis, and as a potential indication of cardiac and metabolic disturbances. Due to the observation of

the nurse in this case, prompt investigation and early intervention was initiated for the patient, who was experiencing the deleterious effects of acidosis and hyperkalemia.

Altered mentation was also an important indication of patient status, and was often regarded as one of the earliest signs of physiologic decline. Alterations in mentation ranged from slight to obvious, with certain distinct events regarded as being highly foreboding. One nurse explained that patients who were about to precipitously decline would often orient to an unoccupied corner of the room or spot on the ceiling and have conversations with unseen relatives or friends. Often, when interviewing patient families about this occurrence, the person with whom the patient was speaking was found to be dead. Speaking about this phenomenon, one nurse explained, "How do you know you've got a patient who's critically sick? ...talking to dead family members in the corner.

You've got a patient doing that, even if they're delirious, something is up." Three nurses echoed the observation that even in patients with mental illness, delirium or psychosis, decreased levels of consciousness or change in behavior or thought processes were considered very informative assessment pieces, and were heavily linked to intuitive perceptions by all of the nurses interviewed in this study.

Having identified important cues that nurses have linked to intuitive phenomena, it was also important to explore what somatic feelings, if any, were experienced by the nurses during the care of a patient who was declining acutely. Common responses to this question included feelings of an adrenaline rush or a sudden burst of energy and clarity. "It's definitely like a sensory change where everything is like just more acute I guess or everything's sharper," identified one nurse. Other descriptions from the interviews include, "everything just like snaps into focus," and, "I'm on high alert...trying to pick

up anything that I can [going through labs and diagnostics]." Another associated somatic feeling identified by the nurses was a feeling of nausea, or being sick to the stomach. Unlike the feeling of clarity, which followed intuitive perceptions of acute decline, a sick feeling in the pit of the stomach often preceded, or was concurrent with, intuitive perceptions and realizations. "I just have this – and other nurses, too, will say this - weird kind of sick feeling in my stomach that something bad is going to happen," expressed one nurse. It was further found that, for five of the six nurses interviewed, these emotional perceptions guided or affirmed intuitive perceptions that directly influenced their practice and clinical decision-making.

#### Gathering further data and supporting evidence

Nurses repeatedly indicated that after experiencing intuitive perceptions of decline, further supporting evidence is sought to confirm or contextualize observations. This data, in addition to verification with colleagues, also strengthens report of physiologic decline to healthcare providers. In interviews, nurses often reviewed available metric data, such as laboratory results, and obtained new assessment data to build a case to support their intuitive perceptions of decline. Nurses also confirmed their intuitive and empirical findings with nurse, and in some cases non-nurse, colleagues such as respiratory therapists and pharmacists. This element of confirmation and consultation was made especially easy by the unique pod-type layout of the unit in which these nurses practiced. Nurses worked in pairs in a four patient pod, each charged with the care of two patients. Despite having separate assignments, the nurses in the pods frequently confer with their 'pod partner' about the plan of care and individual care decisions for all the patients in the pod.

Another source of data gathering and corroboration of perceptions is the nurse interview of the family. "I will usually ask, 'Is this so-and-so's usual behavior? Does he always talk like this?" explained one nurse. This process can help the nurse obtained a better history and therefore a comparative baseline for behavior and physical demeanor. For the majority of nurses who mentioned the family interview, the majority described it as being a helpful tool in gauging patient disposition. Some nurses did indicate, however, that the patient family presented a barrier to effective and timely care and a hindrance to the nursing process.

#### Fear, mentorship, and communication

Within the context of the semi-structured interview, another recurring topic that nurses referred to was the role of fear. Fear played a dichotomous role in intuitive processes, and could be either a motivator or barrier both in intuition and communication of intuitive perceptions. Fears could be grouped into three categories: fear of lack of knowledge, fear of impending decline or patient death, and fear of ineffective communication between the nurse, the family, or the physician. In general, the role of fear was described similarly to the way this expert nurse discussed it,

I still have fear. But it's – it's different from when I started. When I first started, it was because of I was afraid of the lack of knowledge. Now, my fear is I have to look at the individual in the eye and tell them that your loved one of 30 or 40 years is gone. And I could not save them.

Fears of decline often impelled nurses to pursue seek validation from peers regarding intuitive perceptions and spurred further investigation. A fear of ineffective communication between the physician and the nurse, however, was a barrier to taking action on intuitive perceptions of physiologic decompensation. Ineffective communication was described as either non-affirming or hostile physician input upon

consultation about the patient in question when nurses presented intuitive data, or simply lack of action on behalf of the physician. A nurse with years of specialty experience in one population of patients put it this way, "There's some of that fear... not so much, 'Oh, he's gonna yell at me,' but you know, more of the 'I'm not gonna get what I need out of this – out of this person (physician)."

Communication of intuitive perceptions, and the ability of the nurse to take action to further evaluate and stabilize the patient is one issue from the literature that is directly correlated to patient outcomes. The accounts of the nurses in the study diverged from the literature in that the vast majority felt that they were well supported by coworkers and mentors on their unit, and that physicians within their service line were highly receptive to their perceptions and input. Collaborative and validating relationships between nurses reinforced and strengthened intuitive perceptions of nurses, and nurses identified that they often sought affirmation from coworkers. An experienced charge nurse recalled this interaction with a staff nurse during a time when their patient was slowly developing a pulmonary embolism,

He was telling me that this patient wasn't the same. Things were looking different. He, you know, was working on trying to get a hold of a doctor, trying to figure out what was wrong with him...and at that time, we couldn't necessarily identify exactly what it was. Um, but the patient declared himself very shortly thereafter.

Despite vague alteration in appearance and nominal variations in vital signs and laboratory data, the staff nurse was able to communicate and get support from his superiors who assisted him in further investigation and initiation of consultation with the physician. Strong mentorship was also identified as being a part of the unit culture of the nurses we interviewed. A staff nurse who was recently made a clinical preceptor for new graduates said this about supporting and encouraging the intuition and emotional

perceptions of new nurses, "I always – I reassure them that – of their emotions, like I know that they're scared and timid and they kind of are – feel like they're thrown out to the wolves and don't know quite where to start. So I kind of like to guide them."

#### Timely nurse-initiated intervention

In addition to supportive unit culture and a strong mentorship model, the unit policies also make a difference in the nurse's ability to take empowered action based on intuitive perception. At the metropolitan hospital from which the authors recruited nurses, critical care nurses were able to enact protocols to begin laboratory evaluations, administration of emergency medication, and even insertion of an artificial airway without prior authorization from the physician. In addition to traditional methods of stabilization for declining patients, such as rapid response medical teams and 'calling a code', nurses could often begin treatment or more advanced assessment. When communication with physicians was perceived as being ineffective or inadequate to solve patient problems in the face of acute physiologic decline, nurses could fill the gap with protocols. When asked about protocols, one nurse shared:

[The physicians] are sometimes like, "Oh, we can wait. We can wait until morning." A lot of times they try to – working nights I deal with that a lot, too. 'Oh, wait for the next shift – they're fine.' I'm like, 'No. They're not fine.' Like, 'This is not okay.' And you have to kind – you have to stand up and advocate...this is not okay that they're [oximetry is] reading in the 60s and it's been going on for an hour. I'm calling CRNA, like I'm just gonna call. Hey, if you're not gonna come up here I'm calling CRNA and...we're getting them intubated. And then you're gonna have to write me some orders."

Additionally, the bedside nurse is able to recruit other providers to attend to the patient without direct involvement of the physician. A 'rapid response' can be initiated from within the trauma service, which brings an acute care nurse practitioner, a nurse

anesthetist, a respiratory therapist, and a dedicated rapid response nurse to the patient. The team can then further assess, diagnose, and intervene to prevent further decompensation of the patient. This dynamic also tends to equalize healthcare team roles, especially between the primary nurse and the attending physician. The nurse in this setting is uniquely able to advocate for the patient in an autonomous, and ultimately lifesaving fashion.

#### Communicating with physicians

When communicating with healthcare providers at distance, the nurses acknowledged that communications with the physician regarding the patient was like "painting a picture" of the clinical scenario, and that intuitive and emotional perceptions often filled in the gaps in the picture for nurses. Where the physician would most often assess by reviewing labs and looking at monitors and other metrical data, the nurses more often look at the patient aesthetically. "How are you going to keep them alive, make them better, and move them down the path of life? You know, it's not something that's on a piece of paper. It is what you see when you look at that patient," explained one nurse.

Even when communicating with physicians or healthcare providers present at bedside, intuitive perceptions, or perceptions based on aesthetic knowing of the patient can be difficult to validate. When faced with a medically complex patient with significant pulmonary complications being released to a step-down unit, a nurse in the interview cohort explained that she had a difficult time swaying the physician's belief that the patient needed better respiratory surveillance. Despite multiple risk factors for respiratory failure, the consulting physician believed that the patient needed a higher level of cardiac monitoring. "I just knew that [the telemetry unit] would not keep as close an eye on his

breathing," explained this nurse, "sure enough, his tracheostomy clotted off and he went into acute respiratory collapse." The patient in this scenario experienced sudden respiratory failure that precipitated pulseless electrical activity. Initially, this did not alert the telemetry staff to the impending emergency, and it was not until an aide checked the patient that the severity of the situation was realized. Despite resuscitation efforts and the successful recapturing of a pulsatile cardiac rhythm, the patient had sustained a severe hypoxic brain injury, and was readmitted to the critical care unit. The patient remained comatose for nearly a week before the patient's family agreed to allow natural death.

#### **CHAPTER FIVE**

#### Discussion

#### The Clinical 'Toolkit'

From the themes identified from the interviews, a process emerged beginning with the acculturation of aesthetic knowing and culminating in empowered action and improved patient outcomes. While schools of nursing emphasize nursing science and technical competency, often little time is spent developing empathetic and intuitive processes (Carper, 1978). The critical care environment, especially that from which interviewees in this study were enrolled, creates a prime setting for the observation and appreciation of subtle intuitive phenomena (Figure 1). Derived from the results of this study, this toolkit might be used to structure residency and orientation programs for graduate nurses, or to help new nurses gain comfort and competence in recognizing and acting upon subtle changes in the condition of the patient. The toolkit may also be of benefit to established intensive care units seeking to create a more intuitively-led nursing care environment, enhance the use of nurse-led protocols, and provide empowerment to staff nurses. Elements within the toolkit are also meant to encourage dialogue between experienced, expert nurses and novice nurses to increase mentorship and cohesiveness of the nursing staff.

#### Recognizing aesthetic cues

The new critical care nurse likely does not recognize aesthetic cues in the patient that would be otherwise obvious to the expert nurse. In observation of the care provided to patients on the trauma critical care unit, experienced nurses often pointed out cues in the presentation of the patient to less experienced nurses. In this way, a mentorship is

created in which intuitive generativity is fostered. This kind of practical coaching helps the beginning nurse to engage in critical awareness of the patient's aesthetic qualities, and links them to potential physiological changes. Knowing the patient and pattern recognition also increase intuitive perceptions about patient status.

#### *Intuiting the problem*

Once recognition of a potential problem or change has occurred, intuition regarding its causation is engaged. The intuitive thought process has both a cognitive/logical element based out of experience and education, and an emotive/psychological element based on empathy, somatic feeling, and underlying fears for the patient. Together, both the cognitive and emotive elements help the nurse to better analyze the situation at hand, and develop a course of action. Further, the expert critical care nurse may not even cognize distinct physiological process and may have extrapolated them to more complex abstractions relevant to their patient population.

#### Validating and confirming perceptions

After the potential problem or change has been identified and aesthetic knowledge has been employed to analyze its implications, the nurse may then seek validation of the problem from peers or specialists in other services. The nurses in this study often chose to gather more data in the form of assessments and diagnostics to support their beliefs when they perceived a patient was declining. The presence or absence of support is vitally important to the nurse as he or she begins the process of intervention. Proper validation and provision of appropriate means for assessment of the patient are a precursor to taking empowered action, which allows the nurse to protect and advocate for the patient. In the absence of validation, the nurse may become frustrated, doubtful, and powerless. If the

nurse fails to act on intuitive perceptions of decline, this may lead to poorer patient outcomes and medical instability.

#### Acting on behalf of the patient

The nurse, once the problem has been observed, analyzed, and validated, must then act to ameliorate the issue. Communication with advanced care providers such as physicians may be necessary. As evidenced from the nurse participants in this study, nurse-led protocols can be employed, either prior to making contact with the physician, or if communication has not produced sufficient action and intervention. When physician communication has produced a sufficient action plan, or a nurse-led protocol has yielded a positive outcome, patient outcomes tend to be improved. If empowered action fails to take place, patient outcomes may suffer, and physiological integrity of the patient may be lost. Critical care health professional teams should develop nurse-led protocols that can be quickly implemented to protect patients, and empower nurses to take meaningful action and engage in advocacy for their patients.

#### CHAPTER SIX

#### Conclusion

The intuitive process defined in this presentation of data describes four different aesthetic cues that promote 'gut feelings' which then progresses towards positive or negative patient outcomes. For the critical care nurse, being able to clearly identify these intuitive perceptions is the first important piece of the process. Knowledge of clinical data coupled with experience in critical care situations allow nurses to truly know their patients. In addition, being able to report this awareness and value its clinical implication for the patient can determine the outcome. In this specific study, the authors found that the experienced nurses interviewed felt confident in their ability to identify these feelings, as well as communicate them and act upon to promote patient safety. Finally, with positive reinforcement from nursing managers, fellow staff nurses, and other members of the healthcare team, the patient is more likely to have a positive health outcome. Previous literature discusses how mentors and managers should "support the novice nurse in developing ways to report intuitive experiences to other nurses and physicians so that these cognitive experiences are respected rather than ignored" (Rew, 1990, p. 37).

### Teaching intuitive thinking in clinical practice

The current results reiterate Rew's conclusion stating, "in-service education can be planned to enlighten critical care nurses about the legitimacy of intuitive knowledge" (Rew, 1990, p.35). Providing such informative opportunities for experienced nurses may serve as a sort of debriefing, allowing them to express their feelings, support each other and empower them to recognize this intuition as an important tool in nursing practice.

Nurses "stated that they felt good about the opportunity to discuss their intuitive experiences in clinical practice" (Rew, 1990, p. 36). Validated nurse intuition followed by empowered action leads to better patient outcomes and safety as shown by the results of this study. Therefore, promoting this process of validation and empowerment are a vital point to improving and maintain patient safety.

#### Adapting an educational model

At this specific facility where the research was conducted, mentors are called clinical coaches and they are expected to complete a course preparing them to mentor new graduates nurses in critical care settings. Clinical coaches are trained in different tools for teaching adult learners, as well as kept up to date on current hospital protocols, so they may prepare their interns for success in critical care nursing. Data regarding the importance of intuitive process in bedside nursing should be implemented into these courses to promote nurse empowerment and improve patient safety. If clinical coaches are more aware of these intuitive processes themselves and are able to instill this practice in the intern, their nurse trainees and patients will benefit in the long run.

As discussed, fear has an apparent role in the intuitive process and those who are more vulnerable, such as novice nurses, are less likely to act upon their instinctive thoughts. Therefore, the novice nurse needs affirmation and empowerment more than most to promote growth and experience in the critical care setting. "Novice nurses can learn to differentiate true intuitions from passing hunches or guesses when they are encouraged to describe clearly and completely what and how they sense" therefore it should be instilled in the education during internships (Rew, 1990, p. 37).

Intuitive care giving is not merely about fostering an environment that encourages

acknowledgement and communication of clinical perceptions but is, in fact, a valuable element of improved nursing care and patient outcomes. Nurse empowerment and coaching, especially of incoming graduate nurses, promotes a culture of intuitive knowing, interdisciplinary collaboration, validation, and staff support. Adopting clinical education models, such as this tool kit, in critical care that train novice nurses, and nurses who are new to the specialty will further elevate quality of care, and provide beneficial augmentation and recognition of esthetic cues that would otherwise remain obscure or unvalued.

**APPENDICES** 

# TABLE ONE

# Demographic Questionnaire

Demographic Inquiry	Importance
Describe your highest level of education in nursing	Participants are asked to describe their highest level of education in nursing to determine not only formal training, but potentially acquire data about certifications or other advanced learning opportunities
How many years of nursing experience do you possess?	This question is meant to directly quantify nursing experience. This contrasts with qualitative measures of perceived expertise.
What is your self-described ethnicity?	Rather than give prescriptive typologies from which to choose, the participant was prompted to explain their ethnic and racial background, which yielded more descriptive and detailed information
Using Patricia Benner's Stages of Clinical Competence, how would you rank yourself?	Nurses were provided a copy of Benner's Stages of Clinical Competence, and asked to rank their current level of perceived expertise in nursing. This measure is vitally important, since the author is interested mainly in the perceptions of care in expert nurses.

#### TABLE TWO

#### Semi-structured Interview Questions

- 1. Tell me about a time recently when you cared for a patient who declined precipitously.
- 2. What about the patient led you to believe that they were declining?
- 3. Describe what emotions you perceived during the care of that patient.
- 4. Describe what you felt physically during the care of that patient.
- 5. What role, if any, do your somatic feelings play in your nursing judgment?
- 6. What role, if any, do your emotional perceptions play in your nursing judgment?
- 7. Tell me about a time, if any has occurred in your practice, when you communicated a somatic or emotional feeling regarding patient status to another clinician.

Authored by B.Rieke and B.Spencer

## TABLE THREE

# Benner's Stages of Clinical Competence

Level of Competence	Characteristics
Level 1: Novice	Nurses who are beginning in their practice, and therefore have no formal experience with clinical situations or the tasks that they must perform.  Nurses at this level rely on rules and policies to guide their practice. However, rules cannot tell the novice how to make relevant or prioritized clinical decisions.
Level 2: Advanced Beginner	The advanced beginner is a nurse who has enough formative experience to begin extrapolating meaningful patterns or aspects of clinical situations. This may be a product of mentorship. A nurse at this phase cannot, however, reliably prioritize needs in complex situations.
Level 3: Competent	The competent nurse is characterized by the ability to cope with multiple clinical contingencies with a reasonable level of mastery. Experiential learning guides their practice and helps them to identify priorities, yet, they lack the efficiency and ingenuity of proficient nurses.
Level 4: Proficient	Nurses who are proficient tend to look at clinical situations as entire, rather than as pieces of data or assessments. Holistic understanding allows the proficient nurse to discern the interplay of the patient's problems. This 'big picture' perspective makes decision making more precise, timely, and specific.
Level 5: Expert	Expert nurses no longer rely on rules or analytical frameworks to guide their practice. Nurses at this level have a vast background knowledge based in experience, and are able to intuitively link the situation to appropriate actions. This intuitive grasp allows them rapidly zero in on patient needs, and address them without wasting time and resources on less successful interventions.

Note: Benner, P. (1982). From Novice to Expert. The American Journal of Nursing, 82(3), 402-7

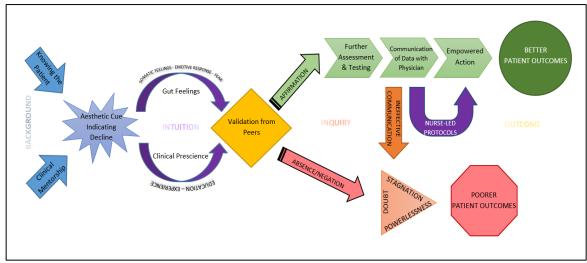


FIGURE ONE

Process of Comportment of Intuition in Clinical Practice

Figure 1. Process of Comportment of Intuition in Clinical Practice

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