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The clinical judgment experiences of expert public health nurses

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The clinical judgment experiences of expert public health nurses

Gaul, Beth Ann Bates, Ph.D.
Iowa State University, 1994

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The clinical judgment experiences
of expert public health nurses

by

Beth Ann Bates Gaul

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ABSTRACT

The purpose of this qualitative study was to describe the clinical judgments made by expert public health nurses in order to gain an understanding of how clinical judgments were made. Six expert public health nurses were interviewed individually and in a group. The data for this study were the interview transcripts.

Data analysis was inductive, using the constant comparative method, which consisted of unitizing and categorizing the data. Six themes emerged from the data, which served to illuminate and interpret the data. The criteria developed by Lincoln and Guba were used to establish trustworthiness.

The findings of the study indicated that: 1) the context of the clinical situation was an important issue for expert public health nurses in making clinical judgments; 2) the process used by expert public health nurses to make judgments was difficult to describe and they used intuitive knowledge to make judgments; 3) expert public health nurses used their past experiences to make clinical judgments in current situations; 4) clinical judgments and the process of making clinical judgments were affected by the relationship the nurse had with the client; 5) experience in making clinical judgments and analyzing the judgments of experts was a valuable way to
learn to make clinical judgments; and 6) the respondent's perceptions of the outcomes of clinical judgments were determined by the feedback received from clients or other health professionals.
CHAPTER ONE
OVERVIEW OF THE STUDY

Introduction

Clinical judgments are an inherent part of the practice of nursing. Each day nurses make a myriad of judgments about the care of clients. del Bueno (1990) suggested that these clinical judgments may be the most important aspect of nursing practice. Because public health nurses practice in homes and communities without the on-site support of other professionals, the clinical judgments they make are crucial to the health of their clients.

One of the goals of baccalaureate nursing education is to provide students with the ability to make clinical judgments and effectively solve problems when caring for their clients. The National League for Nursing Criteria for Evaluation of Baccalaureate and Higher Degree Programs in Nursing (1991) included specific criteria for incorporating clinical decision making into the undergraduate curriculum. Tanner and Lindeman (1987) found that strategies for teaching clinical problem solving were identified as the second highest priority of the sixty-three listed in a Delphi survey of research priorities in nursing education. As a nursing educator, I
have witnessed the struggle that students have in making clinical judgments during their clinical experiences in public health nursing. I have also experienced the frustration of trying to teach students how to make clinical judgments. These experiences have encouraged my study in the area of clinical judgment making.

Statement of the Problem

There has been minimal research on how expert public health nurses make clinical judgments. This knowledge is needed to learn how to teach student nurses to make clinical judgments. Tanner (1987b, 1993) discussed the need to have an understanding of the process of making clinical judgments in order to develop methods for teaching the process. She determined that an understanding of the two aspects of the clinical judgment process was needed to assist in curriculum planning. The first aspect was "an understanding of how competent individuals proceed in determining what observations to make, in identifying health problems from those observations, and in deciding on appropriate actions;" and the second aspect was "an understanding of the progression of such competence, from beginning level to the development of expertise (1987b, p. 155)." This study will address both of these aspects by describing the
clinical judgments made by expert public health nurses as they provide care for clients.

Little information has been published about the development of expertise in clinical judgment (Tanner, 1987b). Researchers have used a variety of theories to guide their research in clinical judgment, including the information processing theory, concept attainment theory, and statistical models of decision making. Most of the research in the area of clinical judgment has used a rational perspective. The rational perspective assumes that knowledge is explicit, formalized, and decontextualized. This perspective advocates the use of a linear model to make judgments and solve problems. Tanner, Benner, Chelsa and Gordon (1993) described the rational model as one in which all information needed about clients is formalized and explicitly stated in processes and rules that are free of the context of the situation. An example of the rational model includes the use of nursing diagnoses and standard protocols.

Clinical simulations were often used by researchers to measure the performance of clinical judgments. However, a major question about the use of simulations was, do they provide an accurate reflection of real nursing practice because of their narrow scope and
inability to illustrate all the variables in the situation. Tanner (1987b) maintained that simulations were useful because they allowed the researcher to examine several subjects' performances on the same task. However, Tanner also supported the need for simulations to be augmented with additional measures of performance in clinical judgment in order to obtain reliable results (Tanner, 1987b). "Research using natural observation of beginners and experts as they perform clinical judgments in practice is clearly warranted" (Tanner, Padrick, Westfall, & Putzier, 1987, p. 362). The use of natural observation would enable the researcher to uncover the tacit knowledge surrounding clinical judgments.

Benner (1984) emphasized the need for researchers to describe knowledge embedded in practice, which is the practical knowledge nurses gain through experiences with clients. She encouraged researchers to tell the stories of experts' descriptions of their practice. Benner (1984) believed that the knowledge of expert practitioners was neglected by nurses for the sake of learning highly technical procedures. She lamented, "An inordinate amount of attention is given to learning the latest technology and procedures rather than to in-depth skill acquisition in clinical judgment" (1984, p. 5). Research about how
expert nurses make clinical judgments could be used in teaching novice nurses how to make effective clinical judgments.

Purpose of the Study

The purpose of this study is to describe the clinical judgments made by expert public health nurses. Research objectives are as follows:

1. To describe the clinical judgments made by expert public health nurses and the issues they consider when making these judgments.

2. To describe the process of clinical judgment making and the knowledge the expert public health nurses used to make clinical judgments.

3. To describe the perceptions of expert public health nurses regarding the outcomes of their clinical judgments.

4. To describe the influence of their past experiences on the clinical judgments the expert public health nurses make.

5. To describe the perceptions of expert public health nurses regarding how they learned to make clinical judgments and the best ways to help others learn to make clinical judgments.
Expert public health nurses employed by a non-profit public health nursing agency in a metropolitan county in Iowa will be interviewed to describe the clinical judgments they make and the processes and outcomes of the judgments. For the purposes of this study, clinical judgment is defined as: "the ways in which nurses come to understand the problems, issues or concerns of clients/patients, to attend to salient information, and to respond in concerned and involved ways (Tanner, 1993 p. 17). These judgments are made in concert with the client in order to protect, maintain, or restore his or her health. Examples of clinical judgments made by public health nurses include determining the need for changes in therapeutic regimes, determining when to refer clients to acute care institutions for emergency intervention, and determining the need to protect families from abusive situations.

Significance of the Study

Clinical judgment research has implications for nursing curriculum planning and teaching (Corcoran & Tanner, 1988; Tanner, 1993). Several authors advocated the use of case studies as a method of teaching clinical judgment (Benner & Tanner, 1987; Carlson-Catalano, 1992; and McMurray, 1992). Case studies are expert nurses'
descriptions of their practice and allow the student nurse to recognize patterns. Benner and Tanner (1987) cautioned that skilled pattern recognition, which they define as the "perceptual ability to recognize relationships without prespecifying the components of the situations," cannot be broken down into pieces (p.24). However, skilled pattern recognition can be taught by examining the situation within its context, by providing feedback regarding the judgment, and by observing how expert nurses make judgments in a variety of contexts. Carlson-Catalano (1992) also supported the use of actual experiences of experts in classroom discussions and believed that the analysis of judgments was empowering to students and enabled them to apply the analysis to other clinical settings. The ultimate goal of this study is to gain an understanding of how expert public health nurses make clinical judgments and then to use their experiences to help students learn about clinical judgments.

Dissertation Overview

The remainder of this study report is divided into six chapters. Chapter Two provides a review of the nursing research on the concept of clinical judgments and thinking processes utilized by nurses as they make judgments, and the implications of these research reports
for this study. The chapter concludes with a description of the conceptual framework that guided the study.

In the third chapter, the methods used to implement the study including research questions, sampling techniques, data collection, ethical considerations, establishing trustworthiness, and data analysis are addressed. Specific interview questions are also included in this chapter.

Chapter Four presents the findings of the research. The themes resulting from the data analysis are described in detail, using the respondent's words to elucidate the findings.

The study results are interpreted and discussed in Chapter Five. Chapter Six discusses the conclusions of the study and suggests areas for further research and recommendations for others interested in learning more about clinical judgments in public health nursing.
CHAPTER TWO
REVIEW OF THE LITERATURE AND CONCEPTUAL FRAMEWORK

Introduction
This chapter reviews research related to the concept of clinical judgments and is organized according to the theoretical perspective used in the research. The theoretical perspectives are the rational and intuitive thinking processes. Also included are the descriptions of the knowledge, both theoretical and practical, used by nurses to make clinical judgments. The conceptual framework for the study, the Dreyfus model of skill acquisition (Dreyfus & Dreyfus, 1986), will be explained and discussed in relationship to this study at the conclusion of the chapter. At the end of each section, conclusions are drawn about the literature presented and implications for this study are discussed.

Rational Perspective
Most research on clinical judgment described the rational processes included in the elements of clinical judgment. Tanner (1993) states "Rationalism is the doctrine that reason alone is the source of knowledge and is independent of experience (p. 273)." The nursing profession has been directed by the rational perspective in their pursuit of formalizing nursing knowledge in order
to make it legitimate. Research has been undertaken to make nursing knowledge explicit and formal (Tanner, 1993). The rational perspective has utilized primarily three frameworks to guide research: the information processing theory, concept attainment theory, and statistical models of decision making.

Information Processing Theory

The information processing theory was based on the work of Newell and Simon (1972) and Simon (1979) in artificial intelligence. This theory compared the human mind to a computer. Problem solving behavior was conceptualized as an interaction between the problem solver (an information processing system) and a task environment (the specific task designed by the researcher). This model assumed that our capacity to process information was limited by the constraints of our short-term and long-term memory and that specific strategies must be employed when solving complex problems to adapt to the memory system's limitations.

Elstein, Shulman, and Sprafka (1978) employed the information processing theory in their study of the clinical decision making skills of physicians and medical students. They conceptualized the decision making process into five cognitive steps: (1) cue utilization, (2)
hypothesis generation, (3) hypothesis-driven information gathering, (4) hypothesis evaluation, and (5) derivation of a diagnosis.

Carnevali and Thomas (1993) used information processing theory as the framework for their book on diagnostic reasoning in nursing. They described the diagnostic reasoning process as consisting of the following components:

(1) collection of pre-encounter data about patient situation, (2) entry into the patient situation, (3) collection of data using screening or problem-oriented approach, (4) coalescing of data into related chunks in working memory, (5) selection of cue or cue cluster of highest priority for initial diagnosing, (6) retrieval of possible diagnostic explanations or patient instances from long term memory, (7) utilization of recognition features associated with the retrieved diagnostic concepts as guides for observation of patient situation, (8) comparison of data in patient situation to recognition features in diagnostic concept, problem script, or patient instances, and assignment of a diagnosis (Carnevali & Thomas, 1993, p. 45).
The diagnostic reasoning process is a linear model that the authors believe is used each time the nurse interacts with clients. Based on the information processing model, it describes strategies to conserve memory space by clustering data into patterns. The diagnostic reasoning processes described above were used in the generation of many research studies in clinical decision making in nursing (Corcoran, 1986a; 1986b; Itano, 1989; Padrick, Tanner, Putzier, & Westfall, 1987; Sanford, Genrich, & Nowotny, 1992; Shamian, 1991; Tanner, Padrick, Westfall, & Putzier, 1987; Thiel, Holloway, Murphy, Pendarvis, & Stucky, 1991; and Westfall, Tanner, Putzier, & Padrick, 1986).

Corcoran (1986a; 1986b) studied six experts and five novices in hospice nursing and their approach to planning a drug administration plan for pain control in cancer patients. An information-processing framework was used to guide the study. The study asked how novices and experts differed in their approaches to planning care, generating alternative actions, evaluating actions, and the quality of the plans for three case studies of varying complexity. The findings indicated that the decision making processes used by the subjects varied with expertise and complexity of the case. Subjects developed more alternative actions
in the complex cases and evaluated only a portion of them. The findings that decision making behavior was dependent on the complexity of the task supported the information processing model, which describes the relationship between the problem solver and the task environment and the adaptations needed to solve complex tasks.

Westfall, Tanner, Putzier, and Padrick (1986) examined the ability of 28 nursing students and 15 practicing nurses to activate clinical inferences. The information processing theory was used as the framework for the study. The information processing model assumed that human information processing capacity is limited by short-term and long-term memory. The authors believed that nurses may have generated clinical inferences or diagnostic hypotheses early in patient encounters in order to "chunk" data to conserve their short-term memory. The study sought to determine if nursing students and nurses activate diagnostic hypotheses and the differences in comprehensiveness, complexity, and timing of the hypotheses between the groups. Videotapes of simulated client situations were used to elicit the subject's diagnostic reasoning process. After viewing the videotape, subjects were able to ask for additional information as they would in actual nursing practice. The
subjects were asked to think aloud through their problem solving process. These thoughts were tape recorded and transcribed for analysis. Six different categories of inferences described the diagnoses. Statistical analysis revealed no significant difference in the number of accurate hypotheses, in the comprehensiveness, efficiency, and proficiency, or the earliness of hypothesis activation between the two groups. However, there was a statistically significant difference between the nurse and student nurse group in the complexity of hypotheses activation, which indicated that more experienced nurses are able to activate more complex hypotheses.

Using the data collected in the above study, Tanner, Padrick, Westfall, and Putzier (1987) examined the cognitive strategies of diagnostic reasoning used by the nurses and nursing students. These researchers believed that the diagnostic reasoning process of nurses and nursing students could be described by models used in the studies of physicians. The subjects activated hypotheses early in the process and used systematic information gathering. The nurses used a more systematic approach and had a greater accuracy in diagnosis than the nursing students.
Tanner (1987b) pointed out that this perspective assumes that there was a single, generic judgment process used by all nurses in all clinical situations. Holzemer (1986) also pointed out that clinical decision making in nursing does not always follow a linear mode of thinking, such as the diagnostic reasoning process. Another limitation to the rational approach was that several researchers have suggested that more than one method of decision making may be used in making clinical judgments (Benner, 1984; Corcoran, Narayan, & Moreland, 1988; Etheredge, 1989). The information processing theory did not address two crucial aspects of making clinical judgments: the contextual nature of the process and the characteristics of the decision maker. Radwin (1990), pointed out in her discussion of the rational perspective that, "clinical judgment processes may differ depending on the clinical situation" (p.73). The theory did not consider the characteristics of the decision maker, such as the nurses's cognitive strategies and memory capabilities (Tanner, 1984) and the nurses use of intuition (Benner, 1984; Benner & Tanner, 1987; Rew, 1988). These aspects of making clinical judgments have been studied and have been
found to have an impact on the process of making judgments.

Concept Attainment Model

The concept attainment model was used as a framework for the work by Cianfrani (1984) and Matthew and Gaul (1979). Concept attainment described the cognitive strategies that are used to develop categories or concepts when given a set of information. The strategy used is determined by the amount and relevance of information that is available. The applicability of this model to describe the information gathering and hypothesis testing has not been resolved by these studies (Tanner, 1987b).

Mathematical Models

Because of the probabilistic nature of clinical decision making, some researchers have used mathematical models to gain understanding of clinical judgments. The Bayesian Model is a statistical model for determining the probability of making a diagnosis after acquiring new information. The Bayesian model is often illustrated by the use of decision trees which include possible diagnoses and their probabilities (Reilly & Oermann, 1992). Jones (1988), used this approach in the development of a decision tree for the diagnosis of risk of pressure sores.
and believed it was helpful to nurses by identifying the sequences of decisions and their possible consequences.

Another mathematical model is the lens model which uses correlations to express the relationships between cues and diagnoses (Reilly & Oermann, 1992). Inferences or judgments are made based on the probabilistic relationship of the cues to the state of the patient. This model was applied to research regarding inferences in nursing done by Hammond and colleagues (Hammond, Kelly, Castellan, Schneider, & Vancini, 1966; Hammond, Kelly, Schneider, & Vancini, 1966a, 1966b). This research focused on the application of the lens model to define cognitive tasks in nursing, the information units used in making an inference and information seeking strategies for making inferences. The findings indicated that no single cue correlated to a specific action and that no information units correlated to a specific inference. Tanner (1986) concluded that studies using this model as a framework are not consistent with clinical practitioners. The mathematical formula does not account for the human factors and biases which affect clinical judgment.

Recently, Tanner (1993) described six aspects of clinical judgment that were not usually discussed in studies which used cognitive frameworks. These six
aspects were as follows: a) the role of context and the situation, b) the role of the narrative, c) the interplay of theoretical knowledge and practical know-how, d) the role of intuition and reason, e) the role of emotion, and f) the importance of knowing the person.

Summary

This section reviewed the literature which used the rational perspective in studying clinical judgments. Although there has been a plethora of research based on the rational perspective there are several limitations in using this perspective: (1) it does not address the contextual nature of the client situation; (2) the characteristics of the decision maker are not included; (3) it assumes that the process of making clinical judgments can be broken down into discrete parts; (4) it attempts to make all knowledge needed to make clinical judgments formalized and explicit; (5) it assumes that all clinical judgments are made using the same process; and (6) it is a linear process.

This study will examine the phenomena of clinical judgment including the context of the nursing situation and the expert characteristics of the nurses. Based on the assumption that judgments do not always occur in a linear fashion and that the clinical knowledge used by
experts may be ineffable, this study will examine the clinical judgments made by expert public health nurses.

**Intuitive Perspective**

The intuitive perspective on clinical judgment making, in contrast to the rational approach, considers the context of clinical judgments. Pyles and Stern (1983) in their grounded theory research of critical care nurses, emphasized the "nursing gestalt" or examining judgments from a holistic view rather than analyzing the components of the judgment. The "nursing gestalt" is a matrix which includes the nurse's knowledge, experiences, identifying client cues, and gut feelings linked together to develop nursing diagnoses. The intuitive perspective lends itself to a qualitative research approach rather than an analytical quantitative approach. This allows the researcher to examine the context and "nursing gestalt" of each situation. The qualitative perspective attempts to understand clinical judgments from the nurses' point of view and experiences (Morse, 1991). This approach to understanding developed from the descriptions or narratives and observations of nurses' clinical judgments within the context of their practice setting.

Nursing researchers using the intuitive perspective have helped us to understand some of the characteristics
of nurses which impact on clinical judgments, such as the competencies of novices and experts (Benner, 1984; Brykczynski, 1985; dela Cruz, 1991; Etheredge, 1989; and Zerwekh, 1990) and intuition (Benner & Tanner, 1987; Rew, 1988).

Nursing competencies

In her pioneering work describing the competencies of hospital nurses, Benner used a qualitative approach to gather information from 72 expert and 37 novice nurses. In individual and small group interviews, the nurses were asked to relate stories of their practice. They were asked to describe critical incidents in their practice by describing the context and providing detailed descriptions of the incident, and to then interpret the situation. A critical incident was defined as, "an incident in which you feel your intervention really made a difference in patient outcome, either directly or indirectly" (Benner, 1984, p.300). Later in the study the researchers regretted using the term critical incident because of the association with critical patients and crisis events. The researchers also used participant observation methods with 26 nurses to describe the nurse's performance at varying levels of skill acquisition. The data were analyzed using a strategy based on Heideggerian phenomenology.
Benner (1984) described the data analysis technique in the following manner,

The interpretive strategy used was based on Heideggerian phenomenology, which fits the description of constant comparative method by Strauss and Glaser. However, unlike the Strauss and Glaser approach, the intent was not to come up with theoretical terms but rather to identify meanings and context. (Benner, 1984, p.16)

Benner's results included a rich accumulation of exemplars and paradigm cases, descriptions of five levels of nursing skill proficiency, and descriptions of thirty-one hospital nursing competencies which were classified into seven domains. Research using this perspective has revealed that the knowledge used to make clinical judgments is embedded in practice and derived from experiences with similar and dissimilar situations (Benner, 1984).

The research completed by Benner (1984) provided the foundation for the research done by Brykczynski, 1985; dela Cruz, 1991; Etheredge, 1989; and Zerwekh, 1990. In her study of 22 nurse practitioners, Brykczynski (1985) described the clinical practice knowledge of nurse
practitioners in ambulatory care settings and expanded on Benner’s domains and competencies of hospital nurses.

The Dreyfus skill acquisition model (1986) and Benner’s levels of skills proficiency (1984) were utilized by Etheredge (1989) in her study of expert critical care nurses’ clinical decision making. Etheredge observed four expert pediatric critical care nurses in the intensive care unit to determine the process of their decision making. Her results indicated a need for a new decision making model in nursing because the decision making process the nurses described did not fit with the diagnostic reasoning model proposed by Elstein or with the Dreyfus model of skill acquisition.

Tanner, Benner, Chesla, and Gordon (1993) explored the theme of knowing the patient in their study of expertise in critical care nursing. They found that knowing the patient included knowing the patient on a person level and knowing the patient’s pattern of responses to physical and emotional stressors in a critical care environment. They concluded that knowing the patient was an important issue in making clinical judgments.

Zerwekh’s (1990) research focused on describing the clinical practice competencies of expert public health
nurses working with maternal-child health clients. Her research design and analysis were very similar to those used by Benner (1984) to describe the practice competencies of hospital nurses. Zerwekh interviewed 30 expert public health nurses and her analysis described 16 nursing competencies. These 16 competencies paralleled the 31 hospital nurse competencies described by Benner (1984).

In order to investigate the phenomenon of clinical decision making and to develop a theory to explain how home health nurses make patient care decisions, dela Cruz (1991) interviewed 21 home health nurses. Her study used a grounded theory design and constant comparative techniques for data analysis. dela Cruz found that the theme, managing patient care, explained how home health care nurses made decisions. This theme integrated three cognitive theories, including information processing, cognitive continuum, and skills acquisition. This theoretical integration of both rational and intuitive perspectives was an unique aspect of this study.

Intuition

Benner and Tanner (1987) used the Dreyfus model in the study of expert nursing practice using six aspects of intuitive judgment. Intuition was defined as
"understanding without a rationale" (Benner & Tanner, 1987, p. 23). According to Dreyfus and Dreyfus (1986) the aspects of intuition were: a) pattern recognition, b) similarity recognition, c) commonsense understanding d) skilled know-how, e) sense of salience, and f) deliberative rationality. These aspects of intuition differentiated intuitive thought from analytical or rational thinking patterns. The following paragraphs described the six aspects that Benner and Tanner (1987) found in their research of 21 expert nurses. Although they described the aspects separately, they stressed that each of the aspects work together for expert intuitive judgment to occur.

Pattern recognition was described by Benner and Tanner (1987) as, "a perceptual ability to recognize relationships without prespecifying the components of the situation"(p.24). The context of the situation was an important part of the pattern. Lists of features to look for in client situations did not capture the essential relationships or subtle variations of client situations in clinical practice.

Similarity recognition was recognizing "fuzzy" resemblances despite differences in past or current situations. Recognizing similar and dissimilar situations
made identifying problems possible in highly ambiguous circumstances. Expert practitioners selected relevant clients for comparison and were able to perceive client problems through the lens of previous experience.

Benner and Tanner (1987) related narrative examples of the commonsense understanding of expert nurses. Experts had an understanding of the culture and language of illness and disease. Experts used cues like how clients look, talk, and eat to give them an understanding of their illness. Although these observations were available to everyone, only the expert saw their relevance in recognizing subtleties and their relationship to changes in the illness experience.

Knowing how to do something, but having difficulty describing it in words, was a description of skilled know-how. This lack of ability to verbalize the skill may frustrate those who are more analytically oriented. The unique and complex skilled judgments that are needed to take care of clients in dynamic situations often are difficult to verbalize in a precise manner. The lack of precision was due not to a lack of judgment but to a consideration of the possibilities for each individual client (Benner & Tanner, 1987).
A sense of salience was to be aware that certain events were more important than others (Tanner, 1988). Expert nurses did not consider all observations and tasks as equally important but determined what was important without resorting to rule governed behavior (Benner & Tanner, 1987). Having a sense of salience was important for experts to have as they observed clients and made judgments about individual clients. A prerequisite for a sense of salience was having an indepth knowledge and understanding of the client.

Deliberative rationality was the ability to change one's interpretation of a situation by considering other alternatives. Experts view client situations in terms of past situations, and in some instances they may have a wrong perspective. Viewing situations from a different set of hypotheses may allow facts to be perceived that were missed previously. Deliberative rationality attempts to prevent tunnel vision or imposing a pattern of decision making, regardless of the situation (Benner & Tanner, 1987).

Rew (1988) also studied intuition in decision making by interviewing 56 nurses in critical care and home care settings. The nurses gave examples of types of intuition and their feelings about using intuitive knowledge. The
data were analyzed into themes which were consistent with three attributes of intuition: cognitive inference, gestalt intuition, and precognitive function. The author noted that it was important to recognize intuition experiences when studying clinical decision making.

**Summary**

This section reviewed the literature which used the intuitive perspective in studying clinical judgments. It described research that used a holistic perspective which stressed the importance of context. Six studies described the varying levels of skill acquisition among nurses and how skill level could impact clinical judgments. Two of the studies examined how nurses made clinical judgments, but only one looked at how experts made clinical judgments in a pediatric setting. This literature review documents the need for investigation on how expert public health nurses make clinical judgments.

The literature in this section also emphasized the need to include the role that intuition plays in clinical judgment making. The six aspects of intuitive thoughts described by Benner and Tanner (1987) provided insight into expert judgment making.
Theoretical and Practical Knowledge

Benner (1984) described two distinct types of knowledge that nurses use to guide their actions. The first type was theoretical knowledge, which was formalized with rules and principles. Theoretical knowledge in nursing came from other sciences, such as biology or anatomy; or research in the discipline of nursing; or theory based on reflection on practice (Tanner, 1989). In comparison, the second type of knowledge was practical knowledge. Tanner (1989) had described the characteristics of practical knowledge as follows: (1) it is often tacit knowledge; (2) it may be based on past situations that the nurses has had with similar or dissimilar client; (3) knowledge of a particular client and knowledge across clients with similar characteristics; and (4) it is dependent on the context of the situation for meaning.

Bourdieu (1990), an anthropologist, described the differences between the logic of science or objectivity and the logic of practice as follows:

...if practices had as their principle the generative principle which has to be constructed in order to account for them, that is, a set of independent and coherent axioms, then the
practices produced according to perfectly conscious generative rules would be stripped of everything that defines them distinctively as practices, that is, the uncertainty and "fuzziness" resulting from the fact that they have as their principle not a set of conscious, constant rules, but practical schemes, opaque to their possessors, varying according to the logic of the situation, the almost invariably partial viewpoint which it imposes, etc. Thus, the procedures of practical logic are rarely entirely coherant and rarely entirely incoherent (p. 12).

Both types of knowledge are essential for clinical judgment. Based on research by Benner (1984), we know that novices relied more on rational approaches, which were used with theoretical knowledge, and that experts relied on intuitive approaches, which required practical knowledge. Tanner (1989), in her model of clinical judgment, described situations in which expert clinicians would use both rational and intuitive processes with a blend of theoretical and practical knowledge.

Conceptual Framework

The conceptual framework that guided this study was based on the Dreyfus Model of Skill Acquisition developed
by Stuart Dreyfus, a mathematician and systems analyst, and Hubert Dreyfus, a philosopher (Dreyfus & Dreyfus, 1986). Their assumption was that the human mind was a better problem solver than artificial intelligence because it takes intuition into account. The model evolved from their study of the skill acquisition process of airplane pilots, chess players, automobile drivers, and adult learners of a second language. From this research they developed the five stages of skill acquisition: novice, advanced beginner, competent, proficient, and expert (Dreyfus & Dreyfus, 1986). The following described their beliefs about skill acquisition:

As human beings acquire a skill through instruction and experience, they do not appear to leap suddenly from rule guided "knowing that" to experience-based know-how. A careful study of the skill-acquisition process shows that a person usually passes through at least five stages of qualitatively different perceptions of his task and/or mode of decision-making as his skill improves (Dreyfus & Dreyfus, 1986, p. 19).

Not all individuals proceed through all the stages to become an expert. The following paragraphs discuss each skill level and address concepts important to the study of
clinical decision making, such as the role of context, how data are gathered and categorized, the role of intuition, and role of experience.

The novice seeks out rules for action when learning a new skill. Objective facts and features of the skill are sought out by the novice. The context of the situation is not considered as important as the objective facts of the situation such as a client's weight, blood pressure and pulse measurements. When novices found facts that differed from normal, then they followed the rules about what action should be taken when there was an abnormality. The behavior of the novice was limited and inflexible (Benner, 1984). Individual pieces of information were collected and dealt with without a sense of how all the pieces of data fit together.

With more clinical experience, the novice started to have the skills of an advanced beginner. The advanced beginner started to look at similarities among recurrent meaningful aspects of client situations (Benner, 1984). The aspects of the situations were now considered within the context of the situations and the advanced beginner looked for more rules to apply to client situations. Advanced beginners had difficulty prioritizing and
determining which elements were most important in complex client situations.

The competent nurse can sort through the vast array of objective and situational elements of a client situation and can determine which are most important. Assessing each client's needs and making plans based on those needs, the competent nurse can cope with the many contingencies of clinical nursing (Benner, 1984). At the competent stage, the nurse felt accountable and responsible for the plan she developed and had a stake in the outcome of the client situation. Benner (1984) found in her research that competent nurses believed that a successful outcome of her plan of care was deeply satisfying, and that the decisions that were made leave a vivid memory for the nurse (Benner, 1984).

During the proficient stage, decisions were made based on similar situations and plans that worked successfully in the past. Patterns were recognized by the proficient nurse and were not broken down into separate components. Dreyfus and Dreyfus (1986) called this, "holistic similarity recognition" (p.28). Intuition was included in this stage and was described as, "an understanding that effortlessly occurs upon seeing
similarities with previous experiences" (Dreyfus and Dreyfus, 1986, p.28).

"An expert’s skill has become so much a part of him that he need be no more aware of it than he is of his own body" (Dreyfus & Dreyfus, 1986, p. 30) The expert was able to recognize patterns and when a similar pattern was encountered in clinical practice the memory was triggered and the correct diagnosis or plan came to mind. The expert’s experience allowed her to rely on pattern recognition rather than analytical principles when making decisions. The expert nurse knew when an action or intervention was required based on experience and did not usually consider alternatives. Relying on an intuitive grasp of the situation, an expert nurse zeroed in on the problem’s important aspects without wasteful consideration of various possibilities (Benner, 1984).

The conceptual framework provided perspective about the skills of experts and the knowledge they use to make clinical judgments. The conceptual framework also provided a basis for the importance of a research design that included the context of the nursing situation and for developing questions to ask expert respondents about their clinical judgment skills. Chapter Three describes the research methods used in this study.
CHAPTER THREE
METHODS AND PROCEDURES

Research Design

Qualitative research methods were used in this study to gain an understanding of clinical judgments made by expert public health nurses. Merriam (1988) stated that the purpose of qualitative research was to develop understanding rather than generalize or discover a causal relationship between variables. Problems identified in practice are common beginning points in qualitative research. Then questions should be raised, such as, "questions about process (why or how something happens) commonly guide case study research, as do questions of understanding (what happened, why and how?)" (Merriam, 1988, p. 44). This study sought to describe the process and gain an understanding of how expert public health nurses make clinical judgments within their context.

Also a qualitative approach allows for the investigation of the context of the phenomenon. Context is vital to the study of experts. Benner (1984, p.34) stated, "The context and meanings inherent in the clinical situations strongly influence the expert's performance; therefore, evaluation strategies that rely on context-free
principles and elements cannot capture the knowledge embedded in the expert's actual practice."

Qualitative research is earning credence in the field of nursing as leaders discuss the importance of context in the study of how nursing students learn about nursing phenomena. "Qualitative research is needed to identify the characteristics of a phenomenon" (Beck, 1993, p. 263).

**Research Objectives**

Research objectives were developed from the purpose of the study, the review of the literature, the conceptual framework, and my personal experiences as a public health nurse and nursing educator. The research objectives for this study were:

1. To describe the clinical judgments made by expert public health nurses and the issues they consider when making these judgments.

2. To describe the process of clinical judgment making and the knowledge expert public health nurses used to make clinical judgments.

3. To describe the perceptions of expert public health nurses regarding the outcomes of their clinical judgments.
4. To describe the influence of their past experiences on the clinical judgments the expert public health nurses make.

5. To describe the perceptions of expert public health nurses regarding how they learned to make clinical judgments and the best ways to help others learn to make clinical judgments.

Data Sources

The sources of data for this study were expert public health nurses' narrative accounts of the clinical judgments they have made and documents regarding their role expectations. Six key respondents were selected by purposive sampling. Purposive sampling was used because it allows the researcher to select participants based on the needs of the study (Bogdan & Biklen, 1982) and to select which participants the researcher can learn the most from (Merriam, 1988). In this study, the sample needed to consist of expert public health nurses who had experience in making clinical judgments. The criteria used to select the respondents are described in the following section. The documents used as data sources emerged as the research study progressed and as they were identified by the key respondents.
Site and Respondents Selection

Expert public health nurses were selected by the executive director of the official public health nursing agency in Polk County, Iowa. After discussing the purpose of the study with the executive director of the agency in March 1994, she was asked to select six nursing experts within the context of the agency. She was asked to select the experts based on her familiarity with the agency staff and their performance, and her extensive experience (over 25 years) in public health nursing. The executive director was interviewed to discuss the criteria she used to determine the selection of the expert public health nurses included in the sample. The criteria were: "1) education; 2) experience; 3) ability to make good, independent decisions; and 4) high scores on their professional evaluation and performance review" (M. Russell, personal communication, March 14, 1994).

The official public health nursing agency was selected as the site for the study because it met the site selection criteria described by Marshall and Rossman, (1989): 1) it was accessible; 2) there was a mix of the people and processes under study; 3) the researcher could maintain a continued presence as long as needed; and 4)
quality and credibility of the sample were reasonably assured.

The small sample size (six) allowed for intensive investigation of the phenomenon under study. The aim of this research study was to provide an accurate and trustworthy view of the experiences, perceptions, and understandings of a group of expert public health nurses.

The prospective key respondents were contacted at their place of employment on March 14, 1994 by a letter that introduced them to the researcher and the purpose of the study (See Appendix A). They were informed that the study had been approved by their employing agency and the Iowa State University Human Subjects Committee, and would require at least four open-ended interviews and one group interview for each respondent. The prospective respondents were asked to contact me if they had any questions and were told I would be contacting them to discuss their participation in the study.

I contacted the prospective respondents and each agreed to meet with me and discuss their participation in the study. At the initial meeting, the respondent consent form was reviewed (see Appendix B). The form outlined how the data would be used, access to the data, and protection of the respondent's identity in the written report of the
dissertation. The respondents were informed that their participation was voluntary and that they could withdraw from the study at any time. The respondents also were given the opportunity to grant permission to be quoted directly in the written report of the dissertation. All of the prospective respondents agreed to participate in the study and be quoted in the report. Each consent form was signed by the respondent and me. The six respondents remained in the study until it was completed.

**Documents**

Documents were reviewed as they were described by the key respondents as relevant to them in their practice. An example of a document mentioned was the job description for a public health nurse. Documents also were used to describe the context of the setting and develop interview questions. A document summary form was used to help organize the contents of the document (See Appendix C) (Miles & Huberman, 1994). The following documents, developed by the public health nursing agency, were identified by the key respondents as relevant to the study:

- **Job and Personnel Specifications.**
- **Public Health Nurse.**
Data Collection

Collection and analysis of the data were conducted simultaneously, which allowed for the interpretation of data to assist with additional data collection from the respondents (Lincoln & Guba, 1985). A semi-structured interview format was used to collect the data from the expert public health nurses. Questions were developed from the research objectives and purpose to explore the perspectives of the respondents. Additional questions were generated from the data. The aim of the questions was to elicit data that assured that "...the participant’s perspective on the social phenomenon of interest should unfold as the participant views it, not as the researcher views it" (Marshall & Rossman, 1989, p.82).

Interviews

In-depth interviews were conducted with each of the key respondents. Interviews were conducted with the key respondents to obtain specific information about clinical judgments and to confirm the data that were previously collected (Lincoln & Guba, 1985). This method of data collection promoted the gathering of the respondents'
feelings and perspectives that could only be gained through interviewing.

One group interview was conducted following two individual interviews. The purpose of the group interview was to promote interaction within the group and draw out additional and differing perspectives on the phenomenon of clinical judgment.

Key Respondent Interviews

Each of the key respondents was interviewed in the following sequence: 1) individual interview; 2) individual interview; 3) group interview; and 4) individual interview. Each key respondent also had the opportunity to review the data analysis and offer confirmation of, or discussion about, the results. The interviews varied in length from 30 minutes to two hours, resulting in a total interview time of approximately six hours for each key respondent. All of the interviews took place in private rooms so there would be no interruptions. The group interview was in a large private room which allowed for U-shaped seating to promote interaction within the group and facilitate the recording of the interview.

All of the interviews were tape recorded and transcripts were made of each interview. I kept additional notes in a journal to keep track of ideas,
problems, and questions that arose during the interviews. At the end of each interview, I completed the interview summary form (see Appendix D) (Miles & Huberman, 1994). The interview summary form provided a way to identify themes, questions, and reactions to the interviews. This information was later used to develop questions for subsequent interviews and to assist with data analysis.

Initial Interviews

The following initial interview questions were developed from the research purpose and objectives. Additional probes and questions were added in order to clarify or to obtain additional data.

1. Background questions: Tell me about yourself and your nursing education. Tell me how you came to be at this point, starting back as far as you think is relevant.

   The purpose of this question was to establish a relationship with the respondent, gain her trust, and to determine her educational and nursing practice background.

2. Tell me about your work and a typical day for you.

   The purpose of this question was to elicit an understanding of her work environment, role
3. Describe the clinical judgments you have to make in your nursing practice.
   This question was asked to identify the types and descriptions of the clinical judgments made by the respondent.

4. Tell me about one or two of those clinical judgments to help describe the process and your feelings.
   The purpose of this question was to elicit understanding about the context of the clinical judgment and the thinking processes and knowledge that may have been used in making the clinical judgment.

5. Describe the thinking processes you went through and the feelings you had when making these judgments.
   This question was designed to elicit information about the thinking processes and knowledge used to make clinical judgments.

6. What issues do you consider when making these judgments and how do you get the information?
   The purpose of this question was to discover
the thinking processes and knowledge used in making clinical judgments.

7. How long did it take you to make these judgments?
   This question was asked to elicit information about the thinking processes used in making clinical judgments.

8. How did your past experiences help you?
   This question was designed to identify how past experience influenced the clinical judgments made by the respondent.

9. How do you know you made the right clinical judgment?
   This question was designed to elicit comments about the thinking processes used to make clinical judgments.

10. How did you learn to make clinical judgments?
    This question was asked to understand how the skill of judgment making was acquired and additional information about thinking processes and knowledge used in making clinical judgments.
11. Suppose a new nurse asked you how you made clinical judgments, how would you respond?

This question was developed to understand skill acquisition, thinking processes, and knowledge used to make clinical judgments.

12. What else do I need to know but didn't ask?

The purpose of this open-ended question was to allow the respondent to bring up any other areas of discussion that was relevant to the topic that I may have omitted.

**Second Interviews**

Following the initial interview, a portion of the second interview included time for the key respondents to review the data which had been collected earlier and to collect their reactions to the data in order to determine the credibility of the data. The second interview provided time for me to ask the key respondents to expand on their earlier answers and to clarify portions of the first interview. The questions in the second interview were more individualized to the key respondent and provided a time to summarize earlier descriptions. The questions developed for the second interview were developed after reviewing the transcripts from the first
interview and finding data that stimulated further questions. The following questions were asked of all six key respondents at the second interview.

1. How has the process of making clinical judgments changed for you over the years of your nursing practice and why?

   The purpose of this question was to elicit responses about changes in their thinking processes over time and the role of past experience in the processes.

2. How difficult is it to make the clinical judgments you described?

   The purpose of this question was to determine perceptions of the difficulty of clinical judgments.

3. You were selected as an expert public health nurse. How would you define an expert and what are some of the characteristics of expert public health nurses?

   The question was asked to determine the definition and characteristics of experts.

4. If one of your colleagues said, "I want to be an expert public health nurse," how would you respond and what could they do to become an expert?

   This question was developed to understand skill
acquisition as an expert public health nurse.

Group Interview

All six key respondents participated in the group interview. The questions asked were developed from the data collected in the earlier interviews. As with the earlier interviews, I summarized portions of the data analysis and asked for confirmation and/or discussion from the respondents. The following is a list of the questions asked during the interview. Follow-up questions were asked based on the responses of the experts.

1. What is it like to be a public health nurse at this agency?

   This question was asked to determine the context and to establish a relationship with the group.

2. The following is an example that was given about the process of making clinical judgments. Please react to it based on your nursing practice. “I try to pick up something that I’m questioning and I go back and review in mind, has this ever happened before? Have they ever had a past history? If they haven’t, I go on to the next step, how long has it been going on? The next step is how important is this? Do I take it any further? Do I just make a note of it, remember to think about it the next time I visit. And then I decide to go on to the next
step. You have to make contact with whoever needs to be contacted. I usually go backward a little bit first and then go through."

The purpose of this question and example was to elicit more information about thinking processes and to obtain varying perspectives from the group members.

3. Several of you said that the process of how you have made clinical judgments has changed over the years. One example was, "I slow down, I step back from the situation and I try to think more about the total picture and the options". How does that compare with the changes that you have had over the years?

The purpose of this question and example was to gain more information about any changes that have occurred in their thinking processes and to elicit other perspectives from the group members.

4. Many of you felt that experience was important in learning how to make clinical judgments. What kind of experiences do you need?

This was a follow-up question to responses given in earlier interviews and was necessary to determine context and how experience related to skill acquisition.
5. What helped you to learn how to make clinical judgments?

The purpose of this question was to discover other areas that assisted with skill acquisition.

6. Several of you discussed the use of intuition. Here's an example, "I think I almost feel like there's a warning bell that goes off at first and then the more you look it over you think, oh, yes, we need to do something about this". Tell me more about this and how it is developed?

The purpose of this question was to learn more about the use of intuition, how it is developed, and how intuition is used by experts.

7. When I asked you to describe the qualities of an expert public health nurse some of the areas you mentioned were being flexible and open, being a generalist, and being non-judgmental. How did you develop those qualities, how did you learn them? If it is only experience, why aren't all experienced public health nurses experts?

The purpose of this question was to learn more about skill acquisition and how it is developed in these areas.

8. Please share with me your feelings regarding talking about clinical judgments and how they are made.
This was asked because I found that it became easier for the key respondents to talk about the phenomenon of clinical judgments as the interviews progressed and I wanted to determine if my finding was accurate.

**Fourth Interview**

During the fourth interview, the key respondents had the opportunity to discuss any questions or concerns they had about the group interview. The questions asked were individualized to the key respondent and sought to clarify stories and examples they had given in earlier interviews. Discussion of ideas and themes that developed from earlier interviews took place during this interview and the key respondents were able to illustrate the themes with more examples from their nursing practice.

**Journal**

I maintained a journal throughout the research process. The purpose of the journal was to record information about self and methods (Lincoln & Guba, 1985). Journal entries included my thoughts and feelings during the study, discussions with the peer debriefer, the chronological order of data collection, insights about the study, procedures involved in data analysis and a record of methodological decisions and their rationale. Entries
were made after each interview and during each stage of the data analysis. The journal provided helpful insights during the data analysis and interpretation phase of the study.

**Documents**

Information from documents was noted on a document summary form (see Appendix C) (Miles & Huberman, 1994). Data from the documents were used to provide information about the study setting and to determine similarities and differences between the key respondent's perceptions and the policies of the public health nursing agency.

**Data Analysis**

"Inductive data analysis may be defined most simply as a process for making sense of field data" (Lincoln & Guba, 1985 p. 202). In this study, field data consisted of audiotapes of interviews, transcripts of interviews, interview summaries, document summaries, and my journal. The data collection and analysis occurred simultaneously, and Lincoln and Guba (1985) offered four criteria to determine when to stop data collection and organize the data for intensive analysis. The four criteria are: "exhaustion of sources, saturation of categories, emergence of regularities, and overextension" (p. 350). These criteria were met following the fourth interview and
no new data related to the purpose of the study were being revealed.

Data were analyzed inductively by the process of unitization and categorization (Lincoln & Guba, 1985). These processes are described in the following paragraphs.

**Unitization**

Units are "chunks of meaning which come out of the data itself" (Marshall in Lincoln & Guba, 1985 p.345). Lincoln and Guba maintained that a unit has two characteristics: (a) it has heuristic value, and (b) it is the smallest piece of data that can stand alone.

In this study, a unit was defined as a single statement or narrative account that had relevance to the experiences of expert public health nurses making clinical judgments.

Each unit was identified and cut from the interview transcript and placed on to a 5 x 8 card. Each card was coded according to the respondent number and interview number to facilitate identification. The total number of units generated was 752. Eighteen individual interviews with the key respondents generated 547 units and the group interview generated 205 units. Each of the cards was reviewed by a peer debriefer, who had experience in qualitative research, to provide feedback to the
researcher on whether the unit cards met the characteristics of a unit.

**Categorization**

Categories bring together data that relate to the same content (Lincoln & Guba, 1985). The categories for this study were developed by the constant comparative method developed by Glasser and Strauss (1967) and described by Lincoln and Guba (1985). This method consisted of examining the first unit and placing it in a category. The next unit was read and the researcher determined if it fit into the first category or if it was a second category. The remaining cards were read in a similar manner. As cards accumulated in categories, descriptive statements were made that defined the categories. After all the units were in categories, the categories were reviewed to determine if they were discrete (Lincoln & Guba, 1985).

The first set of categories (n=92) described the units of data. The second (n=52), third (n=21), fourth (n=8), fifth (n=8) and sixth (n=6) sets of categories incorporated the descriptive categories into pattern codes. Miles and Huberman (1994) describe pattern codes as "explanatory or inferential codes, ones that identify an emergent theme, configuration, or explanation. They
pull together a lot of material into more meaningful and parsimonious units of analysis" (p.68). Definitions of the categories were developed for the third set to expedite the completion of the categorization and identification of themes. Lists of categories for set one, two, three, four, five, and six are found in Appendixes E through J. Definitions of the set three categories are listed in Appendix K.

At the completion of each set of categories, a peer debriefer provided feedback. After the first category set she reviewed the categories to determine if they were discrete and made suggestions regarding the completeness of categories and naming of the categories to describe the data. Revisions were made based on her suggestions. After the second, third, fourth, fifth, and sixth category sets, the peer debriefer reviewed the categorization and offered suggestions about category combinations.

**Establishing Trustworthiness**

In order to determine that the data and findings of qualitative research studies are credible and applicable to other contexts and respondents, Lincoln and Guba (1985) suggested the standard of trustworthiness. They proposed the following four criteria for establishing
trustworthiness: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

Credibility

Credibility refers to the accuracy of the data interpretation and findings. Lincoln and Guba (1985) discussed the need for the process of the inquiry to be implemented in a way that the findings are accurate and that the credibility of the findings is enhanced, "by having them approved by the constructors of the multiple realities being studied" (Lincoln & Guba, 1986, p.296). This study utilized two mechanisms identified by Lincoln and Guba to establish credibility: peer debriefing and respondent debriefing.

Peer debriefing was used to assist me in becoming aware of my own personal perspectives, obtain feedback about data collection techniques, and to discuss hypotheses that were emerging from the data. A Ph.D candidate in Professional Studies in Education served as my peer debriefer. She had experience in qualitative methods and reviewed my research design, data collection methods, data analysis processes, and findings of the study. Revisions were made based on her insights. She assisted with unitization of data that I felt was difficult to unitize, she suggested consolidation of
categories, and helped to clarify the categories. Our discussions and ideas were recorded in the study journal.

Respondent debriefings are discussions with the key respondents to solicit feedback regarding the credibility of the findings, analysis, interpretations, and conclusions of the study (Lincoln & Guba, 1985). At the end of each interview, I summarized what I heard the respondent say and clarified any misunderstandings. The respondents also reviewed the transcripts after each interview and gave me feedback. The respondents reviewed a draft copy of the data analysis chapter prepared for the dissertation (see Appendix L).

Transferability

Transferability refers to the extent to which the findings of the study can be transferred to a different context. Lincoln and Guba (1985) noted that it was the responsibility of the researcher to provide a thick description of the data and setting so that others who were interested in making a transfer of the findings could make a decision based on the similarities of the contexts. In the results of the study findings I provided a description of the setting and key respondents. The data were described in themes and each theme was extensively
discussed and the key respondent's words were used to illustrate the theme.

**Dependability and Confirmability**

An audit trail helps to establish the dependability (the appropriateness of the decisions made) and the confirmability (that the findings are supported by the data) criteria. An audit trail was developed based on the suggestions of Lincoln and Guba (1985) and Rogers and Cowles (1993). The audit trail included: (a) raw data, such as audio tapes and interview notes; (b) data reduction and analysis products, such as unit cards; (c) data reconstruction and synthesis products, such as category descriptions, findings, and the final report; (d) process notes, such as notes on methodological decisions; (e) materials relating to intentions and dispositions, such as my personal journal and notes of meetings with the peer debriefer.

**Rights of Human Subjects**

This study was approved by my program of study committee and the Iowa State University Human Subjects in Research Committee. The initial letter to prospective respondents discussed the purpose of the study and the credentials of the researcher. Each key respondent signed a research consent form (which was discussed earlier in
this chapter). All transcripts and field notes were kept in a locked filing cabinet.
CHAPTER FOUR
RESULTS OF THE STUDY

Introduction

This chapter begins by describing the setting of the study, a public health nursing agency in a metropolitan county in Iowa. The key respondents are described as a group and their career paths discussed in order to protect their specific identities. Qualities of an expert public health nurse are described by the key respondents.

The study results are described and discussed. Each of the themes that emerged during data analysis is illustrated by the key respondents' statements and stories, from both the individual and group interviews, which exemplify and illuminate the findings of the study.

Setting of the Study

The public health nursing agency that employed the key respondents used in this study is located in a metropolitan county in Iowa. The agency has 43 full-time public health nurses and nine part-time public health nurses on staff. All of the public health nurses are registered nurses and licensed to practice in the State of Iowa. The nurses work from 8:00 am to 4:30 p.m. Monday through Friday, with occasional night call. During the last calendar year, 75,108 home visits were made by the
nurses employed by the agency (S. Gerleman, personal communication, July 5, 1994).

The nurses work with clients in their home setting in order to enhance the client’s health status following a critical event, such as hospitalization or exacerbation of a chronic illness. The clients may be individuals or families. The agency separates the clients they care for into four categories: 1) clients with communicable diseases, such as tuberculosis; 2) maternal and child health clients, such as families experiencing childbirth and those with small children; 3) therapeutic clients or those that require skilled nursing care and are being cared for by a physician; and 4) adult health promotion clients, such as adult clients with health needs who do not have a primary physician.

The public health nursing agency is non-profit and has been in existence since 1908. Fees for the nursing services are based on a sliding fee scale according to the income of the client. Fees are also collected from insurance companies and governmental programs such as Medicare and Medicaid.
Key Respondents

All of the six key respondents were women, as are all the public health nurses employed by the agency. Five of the key respondents had baccalaureate degrees in nursing and one had a master’s degree in nursing. During their nursing education, four of the respondents had been traditional-age college students and two had been adult students. The two adult students became interested in a nursing career after their families had become established. In their words:

After my birthing experiences, it started to come back to me that I would like to be a nurse, probably. With my second child especially, because it was a hard delivery. The delivery wasn’t so bad but the labor was just so much worse than the first one. And I had really poor nursing care; it was at an Air Force hospital and it was just a really bad experience. And I thought, well, you know you get into that, well, if I could help people so they wouldn’t have to go through what I went through, it would be worth it.

All but one of the key respondents had experience in an acute care institution, such as a hospital, prior to their employment as a public health nurse. One of the key respondents joined the agency immediately after she graduated from college.

I started working here as a graduate nurse, so I’ve worked here really my whole career except at the hospital as a student.
The other key respondents decided to move their nursing practice into the field of public health nursing for various reasons. Their responses follow:

I went to [the University] and after I graduated and worked oncology there for four years and started getting burnt out on that...so I was down for a weekend and called up Visiting Nurse Services and got an interview and that was 11 years ago and I’m still here.

I graduated from college in 1978 and from there I worked at [a hospital] for about four years in Medical-Surgical Intensive Care. I came over here, [Visiting Nurse Services] worked here a couple of years. I went back to the hospital for about a year because I was getting married and my husband was working evenings so we decided that I would try working evenings so I went back to [the hospital] for about a year and was not happy at all, so I came back here. Then I worked here a couple more years and then I went to [an insurance company]. I worked there a couple of years and then a friend of mine was an Employee Health Nurse and they had an opening there so she called me and I interviewed there and got a job there. I worked there almost three years and that job was eliminated so I came back here.

After college, I came to Des Moines and went to work at [a hospital], worked Urology for about two and a half years. Then there was this man who hauled me off to [another state] and I worked out there for about 8 months, came back here on the same floor and got caught in the layoff. That was at a time when there was an abundance of nurses, no positions were open and I went to work at [a weight -
loss clinic]. I had applied here at the time I got laid off and it was like ten months later I was called in for an interview and got hired to work here. That's how I landed in public health. I've been here ever since [1984]. I've enjoyed the diversity, being out and about, the flexibility. I have worked inner-city seven years now.

The October following graduation, I moved to [another state], and got a job in the oncology unit which gave me a good knowledge base, a lot of very sick people. I took a leave of absence for a while and came back for about eight months and worked as the relief charge nurse on the neuro-science floor. I left, I did not like [the city]; however it was a very good cultural experience. I was the only Caucasian person working on the floor many times and half of my patients couldn't speak English, so it was a cultural experience. I really enjoyed it but I did not like the crime, so I moved back and got a job as a home health nurse strictly with Medicare clients. It was a hospital based agency and we were strictly Medicare. We did take some Medicaid clients but they were normally elderly also. Then I moved to be with family members...I worked there for about a year and then I didn't get enough hours at the [hospital] so I did get a part-time position doing home health through a national agency up there. Then I moved back to Iowa and a friend of mine,... she told me to interview here and I did and I'm glad I did and I got the job and I've been working now for two years and it's been a real good experience.
After I was in school, I did do a stint on telemetry and I did the critical care course and I liked it because it was intellectually challenging. There was a lot to learn but I didn't like it because you didn't have that personal relationship with the family. Most people in the hospital don't even remember their time in ICU (intensive care unit).

Summary

The length of time that the key respondents have been employed at the agency varied from two to fourteen years. The key respondent who has been employed at the agency for two years had an additional year of public health experience in other states. Three of the key respondents had been employed by the agency for over ten years.

Qualities of an Expert Public Health Nurse

The qualities of an expert public health nurses are described in two categories: 1) characteristics of an expert and 2) learning needs of the experts.

Administrator's Perspective on the Characteristics of an Expert Public Health Nurse

The executive director of the agency was asked to select six experts within the context of the agency. She stated that the determination of expertise within the agency was based on four criteria: 1) education, 2) experience, both at the agency and with other public
health agencies, 3) ability to make independent judgments, and 4) superior evaluations (performance reviews).

Key Respondent's Perspective on the Characteristics of an Expert Public Health Nurse.

The following characteristics of an expert emerged from the key respondent's responses: 1) broad knowledge base, 2) good decision making skills, 3) adaptability, and 4) completion of documentation.

The following responses describe the broad knowledge base needed to become an expert public health nurse.

I think somebody [who is an expert is one] that has the educational background, usually a BSN. Ideally, I think a good clinical background [is necessary in order to be an expert public health nurse].

I'd say one was several years of experience in public health.

I think having a clinical background also is very important in a public health nurse. You need some other experiences to draw from.

Someone that's had experience. To me experience is probably 99 percent of it.

Your knowledge base, I think I have a very good, wide knowledge base. I think that comes from my schooling and also my experience in various places.
Another characteristic of expert public health nurses discussed by the key respondents was good decision making.

Your decision making ability, your ability to make clinical judgments. Maybe that’s it -- I do make good decisions.

Good decision making.

To be able to look at a situation and know what constitutes an emergency, what constitutes the need to call the physician or the need to send them to the hospital.

Adaptability was described as a characteristic of an expert public health nurse.

Somebody that’s well-rounded and be able to improvise when you need to.

I think it’s a nurse that can go in to a lot of different types of settings and be able to function and perform and provide the services that are needed to a lot of different types of clients.

I think you have to be very adaptable, very organized. I think you have to have some management skills, to manage everybody involved in the care of the family, aids, other professionals that are involved.

I guess the first thing is [being] knowledgeable of the resources, [having] a non-judgmental attitude, [having] the ability to realize that your reality is not everyone’s reality and [having] the ability to feel OK with that.
The other characteristic discussed was the ability to complete the documentation involved in making home visits.

Always your paperwork, how complete is your paperwork? How well [sic] is your documentation because you can be a great person in the field and not be able to document it and that's going to take away from your overall expertness, I guess.

Learning Needs of the Experts

The expert public health nurses believed that they still had learning needs in order to maintain their knowledge and skills and it was important to continue their education and to learn from each other.

I think there's still a lot of things I can learn.

I do take continuing education classes which are relevant to my job.

You have to keep yourself up.

You feel like you're out there on your own, but you're really not. You have a whole group of people here; they may not be right outside the door but there's a lot of people you can go to and say, I don't know what to do with this, or what do you think? Very helpful and you learn a lot from those people.
Summary

The key respondents believed that expert public health nurses had the following characteristics: 1) a broad knowledge base, 2) good decision making skills, 3) adaptability, and 4) completion of documentation. The administrator of the agency believed that being an expert required the following characteristics: 1) education, 2) experience, 3) ability to make independent decisions, and 4) superior performance reviews. These perspectives of qualities of an expert public health nurse are congruent with each other. A broad knowledge base is rooted in education and experience. Both identified good decision making as a quality of an expert. Adaptability and completion of documentation are included on the performance review.

The expert public health nurses all believed that it was important to be a life long learner. The learning may be formal, such as continuing education classes or graduate work; or it may be learning and listening to peers about their nursing practices.

Results of Data Analysis

The data analysis of interviews with six key respondents revealed six broad categories or themes: 1) career paths (discussed in the previous section describing
key respondents), 2) public health nursing roles and practice settings, 3) clinical judgments, 4) clinical judgment issues, 5) clinical judgment process, and 6) learning to be an expert.

Each theme is presented and discussed using the key respondent's words. They had much to share and their stories and insights help illustrate each theme. Real names of the key respondents are not used, in order to protect confidentiality. The results are summarized at the conclusion of each theme.

Public Health Nursing Roles and Practice Settings

The theme of public health nursing roles and practice settings includes three categories of data: 1) nursing practice settings, 2) practice roles, and 3) uniqueness of the public health nurse role. Each of the categories is described separately.

Nursing Practice Settings

This category describes the practice setting for the key respondents. Each respondent is assigned to a specific geographic area and makes home visits to the clients living in that area. The caseload of the respondents varies from 30 to 43 families they see on a regular basis. Each of the respondents usually made six
home visits each day. The following describes a typical
day for the key respondents.

My visits probably last five hours total,
and the rest of the day is coordinating
services. I do a lot of coordinating
services between different agencies or
physicians, trying to make sure all the
care is coordinated. Typically, I'd see
an average of six patients a day and
some days I may see one to two or three
maternal health clients, whether they
be an at-risk newborn, premature, or
other problems. Then I usually see a
couple of elderly clients and then do
paper work.

Usually in my day I'll have two or three of
of the real regular visits and then three
or four of the ones that are kind of
unpredictable, you don't know what you'll
run into. I have quite a few routine
patients that are injections, dressing
changes, general assessments, sometimes
that gets out of control. I see quite a
few babies and some maternal child health
depending on how busy we are.

Typical day, well I get into the office
early. I always like to get there
early to get the computers first. I
usually see about six patients a day.
That's usually my norm because I have
... a lot of driving. Most of my visits
are usually, I'd say half an hour to 45
minutes long, a lot of talking, teaching,
this sort of thing. A majority of my
caseload is elderly. I try to do most
of my patients in the morning and do
my paperwork in the afternoon so I
start out fresh each day. It doesn't
always work that way. I usually do
the majority in the morning and then
I usually have one home visit in
the afternoon.
Typically, I come to the office first. I like to do that if I possibly can and get my day organized, finish up what I have left over and plan the day. I like to make visits in blocks, at least two or three in the morning and two or three in the afternoon. And I like to do my paperwork in blocks of time because I don’t like to go in and out and in and out if I don’t have to.

I usually arrive at a quarter to eight. Sometimes a little earlier if I have pressing things. Usually I try to leave about 9:00 or 9:30 and I go out and see, like this morning I saw four people, maybe see one less if I have an admission, one more if I don’t. Then I have lunch and go the hospital (to serve as the liaison nurse for agency clients that are in the hospital and to obtain referrals from the hospital). I usually try to be there no later than 1:30. I see the social workers there and I work with them on referrals for agencies. It helps them out if they know who we’ve had open and also it helps us. I get a census sheet of who has come into the hospital so I can look at that and if I see anybody’s name I recognize, which you do start to recognize some people that come to that hospital, I let our office know that person is in the hospital.

I generally make visits from about 10:00 to somewhere between 2:00 and 3:00. Sometimes you have early calls that you have to do first before you come in; it’s setting up your day, making your phone calls to organize your clients for that day; handling any problems that have come up from the previous day, completing my dictation and things like that. I prefer to get my dictation done on the day
I make the visits rather than waiting until the next day to do it. Sometimes that carries over to the next day.

The unpredictability of the setting was brought up by the key respondents. Their anxiety about the practice setting is depicted in the following statements. This particular experience took place at night. Normally, the public health nurses make home visits during the day. Because of the dynamic nature of the clients' health problems, sometimes the nurse needs to make a home visit at night.

Last night it was a little unnerving because when I got done putting the catheter in I looked at the guy's bedside table and here's a gun sitting on the beside table and I thought, gosh is that real? Then I thought, well, you dummy, of course it's real. This is really a nice person and I'm sure that they don't want to live there anymore than I want to go there at night, but a lot of times that's not a choice for them.

Practice Roles

The components of this category include: 1) agency nursing practice standards, 2) practice approaches, 3) being organized, 4) accepting clients, and 5) the preceptor role.

The agency has specific nursing practice standards the public health nurses follow. The following standards
were listed in the public health nurse job description and described by the nurses as part of their practice roles.

Makes the initial evaluation visit and regularly re-evaluates the client’s nursing needs.

Initiates the plan of treatment and makes necessary revisions.

Gives skilled, family-centered comprehensive care and helps the client/family to accept responsibility for providing care.

Teaches and advises clients and families on the prevention of disease and disability and on good general hygiene.

Informs physicians and other personnel of changes in the client’s condition and nursing needs.

Confers with other agencies regarding problem cases, exchanges information and attempts to determine a solution for such cases.

Interprets the policies of the agency to families and to other agencies to which the patient has been referred.

Gives guidance on problems found through observation and interview which will help the family assume responsibility for themselves.

Assists with orientation, instruction and guidance of new staff members, students and visitors coming to the agency.

Assumes responsibility in planning and supervising other health care workers, such as home health aids.
Maintains appropriate records, caseload management and writes reports as indicated.

(Public Health Nurse Job Specification, 1992)

The approaches used in providing care were described by the key respondents as "the easy way" and "not the easy way." The key respondents stated that they don't provide care in "the easy way." Their descriptions of these two approaches follows:

I don't back away from the hard situations.

You have to sometimes seek out those tough cases and enjoy them, if you can enjoy them and get in there and really try to help somebody or you're never going to learn. Too often people take the easy way out. The easy way is often not the best way.

I do a lot of teaching and I think that's not the easy way too, is to not sit but to teach somebody how to take care of their dressing, how to have a proper diet. They don't want to have a proper diet but I think you can teach most people.

When asked to give an example of the easy way, the following illustration was given:

Not delving into problem areas. If somebody says, "I had a bit of a cough last night." "Oh, is it better today?" "Yeah." "OK." Then passing over that, not asking more questions, probing a little bit more, just skimming the surface because I think sometimes people do skim the surface. "OK, you look fine, you're fine, I'm out of here".
Another aspect of the role of a public health nurse is being organized about the paperwork involved in the work. The paperwork includes documentation of home visits and preparing the clients' records in order for the bills to be prepared for collection. One respondent stated:

You have to be very organized. That’s a very important part of your job, organization.

The expert public health nurses discussed the importance of being accepting of clients and their lifestyles. In order to collect the information needed to make clinical judgments, the public health nurses needed to be open and non-judgmental with clients and families.

I think that being open is very important. You get people to talk to you more honestly that way if you’re non-threatening to them because you can’t help them if they don’t talk with you honestly and a lot of these people don’t.

I’ve just learned to accept and learned not to question people’s lifestyles and patterns as much as I used to.

[One of her co-workers] was telling me about a family, in this family they kind of batter each other around, not violently, but they’re always hitting each other and another agency turned that in for dependent adult abuse and she didn’t feel it was and it was unfounded. She just knows that that is the way this family interacts. It’s not necessarily the best way, but those people are not totally dependent on each other nor are they tied to
the situation so they always have a choice.

I'm a liaison nurse [at a local hospital]. I can see myself as more open to someone than I see the nurses there being. If someone comes in dirty to the hospital, they tend to make judgments about that person that may or may not be true. I see myself as more open to find out what else is the circumstance or what else is happening in that person's life.

My background was sociology and they really drill into you that you are not to make judgments. You try to be non-judgmental. I think that was a help, too. When I look at groups of nurses, I see myself as less judgmental than a lot of groups of nurses.

I learned that you can't fix people. You can offer them choices but there's nothing you can do that can make them do what you want them to do, so you learn what you can do and hope for the best.

Some other agencies call and say, Oh my God, this is the filthiest home I've ever seen. And I say, gee, I never even really registered it because it was not on my agenda to get their house cleaned.

I think you have to keep your goal in mind. Your goal is to provide the care not to change their lifestyle. You've got to work around it.

I think there's sometimes you think things should be different but some of your clients, that's a way of life for them or that's the way they choose to do things and you're not going to change it, even though you know that they would be better if they changed such as choices with their health care
or whatever, diet or whatever. But there are some that don't want to. They're not going to so you just have to recognize that.

The expert public health nurses related that through life experiences they had developed a non-judgmental approach to working with clients. The key respondents discussed how their attitude toward clients had changed over the years of their nursing practice.

When I was new and younger, ten years ago, you just know your lifestyle, and when you start going into the homes and seeing the different lifestyles and how people live and what their culture is, you realize that there's a whole other world out there and you just can't impose your lifestyle and your way of living onto other people.

I just tell the people, I'd rather you be honest with me, even if you're not doing what the doctor tells you to do, or what we tell you to do. I try to hold my lectures down; I used to lecture people a little more. Now I try to give them more examples and give them the information and try to lead them in the right way but not be as lecturing as I used to.

I think one thing that's really changed for me over the years is that I've become much less judgmental than I used to be. I think that helps.

You just get resistance [when you question people's lifestyle]. For instance, years ago, I used to tell people that the baby has to sleep in his own bed all the time. After you have your own kids you realize that that's not always so — sometimes
it's more important to get some sleep and you have the baby sleep with you. Before I'd tell people, you have to put the baby in the bed, so they'd tell me what I wanted to hear after that. Now, when you're a little less judgmental, I just tell people, I want you to be honest with me and tell me what you're doing. I try not to lecture them. I tell them what they should do but then I say realistically sometimes you can't do these things. You need to know what's ideal and what you should work toward. I think those kinds of things just evolved as I matured.

I think I've just kind of relaxed over the years and just accepted the different lifestyles people have.

Even some situations where you don't feel the parenting is as appropriate as it should be, over the years you kind of recognize that that's the way it is and there are some things you're not going to change and I think you become a little more hardened and laid back.

You recognized that sometimes if you become too aggressive with some things, sometimes a laid back approach is better because if you try to be involved too much, they become resistive or defensive and the next thing you know, they don't want you in there at all and sometimes you're better off to just take a little laid back approach and just try to do some subtle teaching as it goes along rather than having them slam the door and not let you back in.

Toward the end of my pregnancy I did have some problems with that, [being judgmental] because I became somewhat more short and tired and I
wasn't relaxed and able to sit and look at these clients with an open mind. I think I was more closed, more tense and I can see that now. I think that's going to help me be able to ask questions in a non-threatening, more open way.

I think as time goes by, you learn more and more to be less judgmental.

I think I've had a lot of different clients who have opened up and become very honest with me, so I think rapport is a big factor.

Rapport with clients, your ability to be flexible and get along. You may not agree with what they're doing, obviously you don't agree with what everybody's doing but your ability to try to teach them without making them mad at you — that's very difficult.

I try and learn from patients, too. And when I see a patient I try to make them feel like this is the most important part of their day and I am there for them and I am 100 percent concentrating on them and I want them to tell me — after awhile there's kind of that give and take and it really kind of develops as a friendship.

I think, depending on the circumstances and exactly what the situation is, particularly with health promotions, I primarily try to develop a relationship first before I try and pry into a lot of things that they might be defensive about. Sometimes with therapeutics it works the same way as long as it's not a life threatening problem you're trying to deal with.

All of the expert public health nurses serve as
preceptors to nurses who are new to the agency. A preceptor is an experienced public health nurse who assists the public health nurses who are new to the agency in learning the policies, procedures, and culture of the agency. They all believed that this role was important and vital to the orientation of the new nurses. The expert public health nurses’ perceptions of the novice public health nurse and the needs of the novices follows.

I think in the beginning you feel like, as a nurse you can compare with nurses that you work with but as far as your knowledge of the resources and those kind of things, maybe you just do not have it.

It’s very overwhelming when you start. I think the job has gotten more complicated and it’s harder to learn and they’ve [the agency administrators] seen that there’s been a big turnover of new people. There is some value in being a little more supportive and appreciative of people who have been here a long time and can do a lot of things.

I think you need to do anything you can to help ease the transition of new nurses.

I think for this job in particular, you really need that early support.

The expert public health nurses discussed the role of the preceptor and their own experiences as a preceptor to a novice public health nurse.
I think they [the preceptor] acts kind of as a buffer between you [the novice] and the forces outside and the forces inside. When I started, about a week after I started my preceptor quit and if it wasn’t for (a co-worker) I probably wouldn’t be here because you think you did a really good job and because you didn’t do one little thing or something wasn’t right with the charts and then your supervisor would be right on your case. When you’re new you know you want to do everything right and now it doesn’t bother you, you just fix it. You’re hurt that they looked at that one little thing you didn’t get done and really missed the whole point of all this wonderful work you did with this case. I think buffering them [the novices] just keeps reinforcing them, you’re not going to learn it in a day, a week, or a month. It’s going to be six months of discomfort. You’re not going to feel really comfortable for six months.

I think it makes a difference who might be your preceptor, who gets you started in the job, because I think if you’re new you tend to take your attitudes and the way you do things from them, observation.

I think the preceptor is the one that gives you positive reinforcement, because you don’t get it anywhere else.

The expert public health nurses described the positive aspects of serving as a preceptor.

I like to precept, I like to teach people new things and I think it’s good just to go along and observe, you know, like you send your students for a day to observe because maybe what they’re doing isn’t exactly
the same as what we do, although it's a taste of it.

I think you do [have a bond with the nurses you precept] because you feel like you just develop a friendship when you're with them so much.

I kind of like to take students, I like to have the new nurses.

I like being supportive and getting somebody started. I see that as a professional obligation; people helped me along and I'd like to help them along and I'd like for them to be successful at it and to feel good about it and not to just be so frustrated and lost right away.

The expert public health nurses perceived that there were some negative aspects in serving as a preceptor.

On the other hand, it's so time consuming and you're trying to manage your things and fit this in and they are trying to work and make that better. But there are just certain things that have to be done and you just feel like you're being pulled in two different ways. It's an additional burden in one way.

There's several people that have done it [served as a preceptor] so you don't have to do it all the time. Once your person gets going, you're free for awhile.
Uniqueness of the Public Health Nurse Role and Setting

All of the key respondents gave vivid examples of how the role of the public health nurse is unique and different than other nursing practice settings. The following paragraphs describe how the public health nursing setting is different than an institutional setting and how the public health nursing setting affects their nursing practice and the clinical judgments they make.

You see a patient in the hospital and you tell them to go home and soak their feet three times a day and put this stuff on them. But, when you see them at home and you realize that they don’t have anything to soak their feet in and maybe they don’t have water or maybe they’re not able to get the water.

In the home, you’re dealing with, obviously, the home situation whatever that consists of. Sometimes there’s finances and everything else that plays a part. That’s not really the hospital’s problem. They send them out with a prescription and things like that; they don’t think about, does this person have money to get these prescriptions when they get home. Sometimes you get out there and they don’t have their meds over the weekend and have no money to buy them, and are already on their way back.

It’s more holistic, you’re able to do more holistic nursing because you can see [more]. You have more information to base your nursing on because you see more of what that patient is; you see his family, you see interaction with the family, or you see no family or no friends, you see how they keep their
house, [and] how they keep their person. I guess that offers a broader base and also more opportunity for intervention than you would have in a clinic or hospital setting.

In public health or in home nursing, I guess I feel like when we have people in the hospital or the clinic situation, they're in our environment and when we go into their house or where they're at, that's their environment, totally. So we lose a little bit of control. Non-compliance is more evident. You learn that you can't fix people.

If they're in a hospital gown and they have nothing and have few visitors or if you're not there when the visitors come you wouldn't pick up on a lot of things you see in the home, how they decorate, not only their own personal hygiene, but how do they keep their house.

So this is more ongoing and I think involved at a different level.

The hospital is kind of an assembly line—move them in, get them well, move them out.

I think you do more in the home than in the hospital setting because first of all the hospital relationship or clinic relationship is so much briefer. Even if it's recurrent, it's still not the same.

There are environments you see lots of things that maybe you wouldn't pick up on in the hospital.

The respondents believed that the differences in setting between public health and hospital nursing impacts on the judgments they make. The following examples
characterize their feelings about nurses who have recently entered public health nursing practice:

They tend to look at it as more of the same stuff. I'm not sure that I would make the same decisions they would as far as when people are ready for discharge or some of those other things, because I think what they zero in on is a lot more narrow in scope.

In the hospital there's the doctor around someplace. It's easier to get them looked at than it is at home. At home it can be a major ordeal to get them into the doctor's office because they may be bed fast and then that involves calling the ambulance or whatever and then you have to be sure they're going to have to be hospitalized or they're going to have to pay the ambulance bill. There's a lot of things that are just done over the phone.

The autonomous role of the public health nurse was described by all the key respondents.

In community health there's no one down the hall that you can run down the hall and say, "could you come down here and listen to this guy's lungs" or "would you come here and check this blood pressure and see if you get the same think I did". It's you.

In a hospital if you question your judgment, you just grab another nurse and say, "what do you think", well, here you can't do that.

You almost have to be in the home to make that decision and there's no one else there to make that decision but you.
The key respondents believed that a unique element of their role was that they had to be a generalist.

What you really are is kind of a jack of all trades, master of none. That's the truth; you have to know a little about a whole lot of things and be able to go into a different situation, everyday with everybody. It may be something you've never seen before and you have to have the ability to research that in a small amount of time and apply it to the situation in the home.

That's one thing with public health—you're kind of a jack of all trades. You have to know a lot about a lot of different areas instead of being specialized in one.

Summary

This theme described the uniqueness of the practice settings and roles of the key respondents. The examples of how expert public health nurses appreciated the clients they visited exemplify the need for them to be non-judgmental and accepting of clients and their lifestyles. They discussed how their attitudes and feelings toward clients have changed over the years in order to develop a rapport with clients that enables them to make appropriate clinical judgments.

The key respondents emphasized the need for the preceptor role with novice public health nurses. The preceptor acts as a "buffer" between the novice and the
forces from the office and those from clients. Being a preceptor has both positive and negative aspects. It is rewarding to help a novice become comfortable in a new setting, but it requires additional time and energy.

They agreed that the practice setting required a different type of interaction with clients and their environment than that in hospital settings. Rather than being in a specialized practice setting, the public health setting required that they be generalists and care for clients of varying age groups and with a variety of health problems. The examples of the autonomous nature of their practice reflected the need for independent judgment making.

Clinical Judgments

Included in the theme clinical judgment, the categories discussed are 1) clinical judgments and 2) client outcomes of judgments made by the expert public health nurses. The category of clinical judgment includes: 1) examples of clinical judgments, 2) types of clinical judgments, and 3) difficult and routine clinical judgments.
Clinical Judgments

The following are examples the expert public health nurses used to describe the clinical judgments they make while caring for clients in their homes. The clients vary in age and type of health problem, but all reflect a clinical judgment made by key respondents.

I'm seeing a man that's retarded; he is in total congestive heart failure. He is bloated; his face is gray; his legs are peeling. He has gained 30 pounds in a month and now he won't even let me weigh him. This morning he told me he was bleeding on the toilet seat; he wouldn't let me look at his bottom. I don't know if he has GI bleeding or if he has pressure sores or exactly what he has. Today I went and he would let me do his blood pressure but wouldn't let me hear his heart or lungs. I'm not going to go back tomorrow. The reason I'm following him so closely is not because I think we can do anything for him--he refuses hospitalization and he refuses to take his pills. I've made adult protective referrals. They say he is still able to make his own decisions but yesterday I went and he had smoked and burned through the oxygen tubing. His wife is also retarded; she's the one I worry about. She thinks the stuff on his legs -- that she can catch it so she won't get in bed with him, although I don't think he's spending much time in the bed because I don't think he can breathe laying down. So actually there may be reason for us not to go in at all because he's not totally cooperative with the assessment part and he's not willing to change until he would become unconscious or unable to change. I still worry about her because she functions at a fairly low level. He unquestionably is the higher functioning of the two. ...my concern and my reason I've decided to keep going there as frequently as I have, is for her,
not so much that I think I can do anything for him.

I have an elderly gentleman who's almost 90 that I've been seeing. Really, he's needed to go to the doctor for a long time but he refuses. His family hasn't been overly supportive. He's been losing weight. He's lost over 20 pounds since December. His color is lousy. The family says, "what are we going to take him for? We have to sit there five or six hours... and even if he does have something, we aren't going to have any surgery or anything like that done." Last week I got him to agree to go... That entails a lot of work to get somebody like that to go [to see a physician].

I have a Vietnamese individual who does not speak any English. He had some lung congestion and rales and things in his lungs and I had called and set up an appointment to see the doctor. I returned again after that to find that he had canceled the appointment. I have to call someone over the phone to interpret for us when we go and he was indicating that he was having some difficulty breathing and still had the congestion, but he had cancelled the appointment supposedly because he felt better and so then he was asking me for medicine. Then I had to reschedule the appointment again and now I'm going back out today, because he finally went and he's on a bunch of medication. He can't order the medication himself from the pharmacy because he can't communicate with them and in fact he called the pharmacy Hy-Vee -- it's DrugTown-- but he calls it Hy-Vee. I have, through the course of time, figured that out so now I tell him to go to HyVee and he goes to DrugTown.

I have a client who is middle aged and has numerous health problems. She had a pulmonary embolism (P.E.), and ended up in the hospital with a P.E. Then she had calf pain. She has a history of
many concerns and its difficult to differentiate between the one's that need to be reported to her physician and those that I can deal with. Normally I'll call her physician right away, because it didn't seem to be an emergency type situation. Her respirations were fine; her Homan's sign was negative. Her coloring was not very good in the affected foot; there was no difference in calf size, but with her history of a P.E. and her mother had died of a pulmonary embolism and then she had a history of deep vein thrombosis too, so we called the physician and the physician had her come to the office, which was fine.

A couple of weeks ago, I had a some teenagers as health promotions. I had one that wasn't doing very good,[sic] she just wasn't following through with the child care things, feeding the baby when she was supposed to, she was bouncing from bottle feeding to breast-feeding every couple of days. The baby was real fussy and having problems. They were going to meet with her attorney and things were getting a little bit sticky because she wasn't cooperating very well and they asked me to give my input so I had to write a letter and address these concerns and we talked to her about how she was laying the baby....So, I wrote up my concerns about the feeding and the sleeping patterns and that kind of thing.... It was kind of a judgment call on my part... she ended up a week later getting the baby taken away. They gave it to her mother to raise. It was kind of an interesting deal, she called me a liar... said she was a perfect parent at 15. She accuses everybody along the way of not giving her any appropriate feedback so we tried to do that all along but she wasn't hearing anything we said. So that was tough to deal with.
All of the expert public health nurses were able to give examples of the types of clinical judgments they made. One type of clinical judgment is determining the need for medical follow-up with clients. This encompasses determining the need to call the physician or an ambulance for emergency treatment.

When to call the doctor [is a type of judgment I make]. I don't want to be over alarming but I don't want to let something go by, like with wounds. I had one this morning. The retention sutures are in and I just don't like the way they're looking. He's not running a temperature, there's no foul odor but it's one of those things I will call the doctor on just to let them know. Judgments like that, when to tell the patient they need to get in to see the doctor. I don't want to push them, but I think those things are some of the hardest things to know when to contact the doctor.

If the patient isn't tolerating the medication real well, that's something you always want to notify the doctor on.

The expert public health nurses indicated that another type of clinical judgment made is determining when to refer a client to a community agency. This requires information about the agencies such as eligibility, cost, services provided and availability of the services. The nurses make judgments about selecting the community services that best meet the needs of the clients.
Whether they need home health aid, homemaker, Meals on Wheels, referral for para-transit, those types of services. That's sometimes a difficult judgment call because you have to assess the whole home situation and what's going on.

Child Protective or Adult Protective in some cases. Deciding whether they need extra assistance in the home, working with the families to get the right help they need.

The expert public health nurses have to determine the frequency of nursing services for the clients. Many times referrals for nursing services are made by physicians and other health care providers, but the frequency of the home visits is left to the public health nurses' discretion.

A lot of times you get the referral from the hospital and the doctor doesn't specify that he wants you to go three times a week or once a week or for two months. So, I think you have to look at the clinical picture. What happened to them when they were in the hospital; what kind of condition they are in now; what is the potential for complications; what kind of support system do they have?

Two similar patients, one you might decide to see once a week and one you might decide to see once a day, depending on the circumstances, and that is the most practical kind of clinical decision making we do because we do have a lot of autonomy in that area.

The expert public health nurses described some clinical judgments as more difficult than others. The clinical judgments were described as difficult because they involved one of the following: 1) clients with
multiple health problems and terminal illnesses; 2) clients who had subtle symptoms that the expert nurse was able to assess but had difficulty describing to others; 3) clients suffering from child abuse and neglect; and 4) clients with health problems that the nurse had not worked with before. The following examples characterize those clinical judgments that the key respondents perceived as difficult.

There’s been a difficult one, especially when working with terminal clients, whether to send [them] to the hospital or [provide] comfort measures. I had an ALS patient who was very dyspneic -- he just couldn’t get his breath. His ALS was affecting his respiratory muscles. He wanted something to help him to breath. He wanted oxygen, and the VA would not give him oxygen without blood gases and he didn't want to go to the hospital and I think his blood gases were OK. I think he was panicking. I had to make some decisions there. I called the ER physicians at the VA and we discussed whether to send him or not. I asked them [about the oxygen, but] they wouldn't give the OK without drawing blood gases. I just wanted something to make him comfortable. His life wasn’t going to be prolonged but I didn't want to see him suffer. They wouldn’t give him any anti-anxiety medicine over the phone. He had to have them see him. This man, it is very difficult for him to get in. He would have had to take an ambulance or a non-emergency transport and he didn’t have any money, any financial means to get in there.

Sometimes it’s hard to know if you have enough information gathered to make that type of referral to Child Protective Inves-
tigation, or to Adult Protective. It's hard to know if it's enough to really constitute a referral that they'll do something about or if it's going to waste everybody's time.

I think the ones with the kids [are difficult]. Sometimes I struggle a little more emotionally with whether to turn them in to CPI and those kind of things, I think I struggle a little more with than the others.

I think it's hard to report something or refer somebody when you don't exactly understand what's happening and you may not have the data to report; you know something is wrong but you just don't know what and how to describe it. So you call the doctor's office and you say, I really don't know what's wrong here but, ... it doesn't come off very well and they don't respond well to that. They're busy; they want concrete things, a temp of whatever and the pulse rate is this. Those are a little more difficult.

Sometimes if it's something new you haven't dealt with or something that's not real familiar, sometimes it's harder.

In contrast to the difficult clinical judgments, the expert public health nurses characterized some judgments as routine. Their examples follow:

Well, the purely medical ones I don't think I struggle near as much with because you call the doctor and give the report. Another one is making referrals for services and if those aren't appropriate, you can stop it at a later date. Those you can change as time progresses if you need to.

It's just part of the job. You just do it. You have to make those, someone has to make
those decisions and you have to have confidence in your nursing ability to be able to make those decisions. You just do it.

I think you just decide what you're going to do and go with it.

Most are not hard, I don't think. It's either, "it is" or "it isn't."

**Client Outcomes**

The following describes the client outcomes of the clinical judgments made by the expert public health nurses. The expert public health nurses perceived the outcomes in three ways, 1) outcomes that were positive 2) outcomes that were negative, and 3) outcomes that were ambiguous.

The positive outcomes were those where an action resulted from the clinical judgment made by the key respondents or there was an improvement in a client's condition due to the clinical judgment made by the key respondents. Examples of positive outcomes follow.

Because the doctor ordered medication, he came to the same conclusion [as I did].

Sometimes, if it's one like a medical condition, when the condition improves or gets results from some way, then you know.

I guess, depending on how I'm responding to it, if it's a judgment that I've made that I'm going to just watch it and if I go the next time and everything's back to normal, then I know that I made the right judgment, that I didn't jump the gun. A lot of times I
will make the judgment to call the doctor, and nothing is done. We just sort of watch it. I still have made the right judgment in the fact that I've passed on the information. I guess most of it is just how everybody reacted.

I think once they decided to remove the baby and put the mom into a group home so she could get more counseling and that kind of thing, then I felt like we had all made the right decision.

Oh, she didn't have a D.V.T. (deep vein thrombosis) but, especially with her history, I'd rather have her be seen. And I did talk with her physician... and she said have her come in, so that made me feel good.

The negative outcomes of clinical judgments made by the expert public health nurses were described as those where there was a decline in the client's health status following the clinical judgment made by the key respondents.

More often you know you made the wrong decision.

Sometimes you maybe make the wrong decision but you do the best you can.

There have been times, one time that comes to mind is when I had a lady that I saw, she was fairly young, in her 50s. She had problems after a routine hysterectomy, although she had multiple problems throughout her life. She was on a ventilator. They didn't expect her to live. She was in the hospital three or four months. She did live and she went home and then she was in the hospital a couple more times during the time I was seeing her. I saw her one morning and
everything was fine except she told me she was having this itch. When I hear itch, I think of chronic renal failure. I called the physician and said can we draw a BUN and creatinine and see what her kidneys are doing. He said OK with that. Actually, she had called me and I had gotten that ordered. I went out in the morning and the lab lady hadn't been there yet to draw blood, but everything checked out fine, she was fine. Just a really very nice visit. I thought to myself later that she really seemed at peace, that a lot of things had come to closure and she was just fine. She got up, cooked dinner for her family, and they told me later it was a very fine dinner, and that afternoon she had a stroke and she never came out of it. She had multiple problems; she had a lot of long standing and chronic problems but who knew they would end that day. Her blood sugar was fine, her vitals were all fine that morning, she was happy. She really did seem at peace to me. I had a little extra time; we had a nice long chat about the visit with her mom and different things. That afternoon she had a stroke and she never came out of it. The family was real angry with me. I stopped at the house and her husband was outside so I talked to him and he had so much anger about this. I tried to tell him that everything was fine in the morning. Not that I felt any guilt or anything but it was just kind of unsettling to think that they thought there was maybe something that I didn't know, that if she would have gotten to the hospital right away, it would have been taken care of, she would have come out alive. It kind of bothered me for awhile, not really that I was questioned, but things like, what did I miss? Is there anything that I missed? I don't know if you could ever change the outcome of something like this, but was there anything that she told me that -- everything was not OK? I decided really there wasn't, she was fine, it was just one of those things. You just don't know when
something like this is going to happen.

The experts sometimes perceived the outcome as ambiguous.

Sometimes you don’t know.

Sometimes it takes awhile to find out if you made the right decision or not.

There are times when you aren’t certain but I think you simply have to make your best judgment based on what you see and what you’ve been told and go with it. Second guessing yourself can get to be undermining.

You don’t always know.

Summary

The expert public health nurses identified three types of clinical judgments they made: 1) judgments made about changes in a client’s medical condition; 2) judgments made to determine the need for referrals to community agencies; and 3) judgments made to determine the frequency of the nursing services to clients. The key respondents determined the complexity of the clinical judgment on: 1) the severity of the health status of the client, ie. those with terminal illnesses were more complex; 2) the problem of referring clients to Child or Adult Protective Services; 3) the presence of subtle symptoms that the expert was able to assess but were ineffable; and 4) clients experiencing conditions that are new to the expert public health nurse. Routine clinical
judgments were those that were, "purely medical", which the expert public health nurse could report to the medical provider.

The expert public health nurses gave examples of the client outcomes of their clinical judgments in three ways: positive, negative, and ambiguous. The positive outcomes were those that resulted in an action by a medical provider and an improvement in the clients' condition. Negative outcomes of clinical judgments made by the key respondents were described as a decline in a client's health status. At times, the outcomes of clinical judgments were uncertain.

Clinical Judgment Issues

This theme depicts the issues related to making clinical judgments. The categories included in this theme are: 1) client issues in making clinical judgments; 2) risk taking; 3) relationships; and 4) community resources.

Client Issues in Making Clinical Judgments

The following paragraphs relate the client issues that the expert public health nurses perceived as having an impact on the clinical judgments they made and the issues they considered when making judgments.

[An issue is] whether the patient is a real good historian. How much do they give and do I have to go by what I'm
actually seeing? Are they real reliable about going to the doctor? Are they reliable at taking their medications? Have they done their part? That's what I look at.

I usually consider the client and their background and their knowledge, how much they can be responsible for and their support system, whether it be a staff, therapist, or family member, and how much they should be responsible for and should be participating in. Then [I consider] if they’re on medication and/or the status of their medical condition, or mental illness.

What they tell you, what you see, sometimes what you see that they don’t tell you. Very often family members will tell you, give you information.

Sometimes there’s a previous visit or something that you can look back on and say, OK, I’m getting this blood pressure today. Was that what they got the last time? You can use that information to make an assessment too. If the blood pressure was normal last time and this time it’s high, you know something’s different, obviously.

If this was me, what would I do? Would I be going to the hospital? Would I be going to the doctor? And if my answer is yes, and gut feeling and looking at signs and symptoms and when in doubt, it’s better to call than to not call and regret it.

Some [issues] are some non-verbal communications, especially with him. He’s sitting over there taking a deep breath and looking at me, he’s trying to tell me that something’s going on with his breathing.
Risk Taking

The expert public health nurses described an issue in making clinical judgments I called risk taking because it requires the public health nurse to take a risk with clients and/or a medical provider. The risk may be encouraging a client to go to his or her physician or calling an ambulance in a perceived emergency situation. The risk taking described also included talking with physicians to discuss the medical needs of their mutual clients. Nurses risk their credibility with clients and medical providers if they make the clinical judgment to send the client to an emergency room or doctor's office and the trip is unnecessary. Their future credibility with the client and the medical provider is placed at risk when this occurs.

In order to make the right choice, you might have to take a risk once in a while.

Sometimes don't you make a decision to call 911 or something and you think it's very important that they get there, but in the back of your mind you think, what if he's OK? or what if they see him and send him home - and I'm going to look like a fool. They get to the hospital and their P02 is 31 and you think, thank God I was right.

You have to realize that it's not just that it would make you look like a fool; it's a big financial decision.
That's exactly right. You're going to cost them a lot of money if you call an ambulance and they get sent right back home, not to mention a whole lot of inconvenience.

If you make an error in judgment, it will undermine your credibility with that person.

The next time you want them to go be checked, they say, the last time they sent me home.

I kind of worry about it, it's better to error [sic] on the side of caution.

You know, with the cost the way it is, it would be terribly embarrassing to tell someone they really need to go to the hospital and although you know it's better to error [sic] on the side of caution, and then find out nothing was wrong with the person.

You do have to watch because of physician's seeing them too often or sending them to the emergency room because of the high cost, so if I can make a phone call and work things out over the phone, that's the best.

I can't really think of a time that I didn't because I will call - even if it's irritating to them [physicians]. I think it's pretty appropriate--it's very rarely inappropriate to call.

I've had past experiences where I've been just kind of raked over the coals for calling somebody or wanting to send them to the hospital, you know, go ahead and send them and then talk to irate physicians about too many admissions and Medicare getting on their case, so I try to call if at all possible before I send them unless it would be a real emergency.
Relationships

All of the expert public health nurses discussed their relationship with clients as an issue they considered when making clinical judgments. They gave examples of knowing clients over a long period of time and protecting those relationships. Other examples included when they had not known clients at all and how the duration of the relationship was a factor in making clinical judgments.

I think if you know someone you're more sure of what you perceive, you're more sensitive to any differences from time to time seeing the people. If you've been in there for a while you kind of have a more general idea of what their life is really like versus did they clean up their act for a half an hour when you're there one time.

I think it would be different if today were my first visit and I didn't know these people. I think my decision would be totally different. Then I would probably insist on coming back tomorrow. I would probably be more insistent on him getting some medical help and I probably wouldn't quite have a handle on her level of functioning because I think a lot of times at first observation she appears to function higher than she really does.

If it's just a new person, you wouldn't recognize that [a subtle symptom that indicates a change in a client's medical status] and that's the advantage of continuity of care. Someone else may walk in and not recognize some things that you might.
I think you might tend to act on something even if that data didn't really necessarily support you totally [because of the duration of the relationship].

The following describes how the expert public health nurses maintain and protect their long term relationships with clients. They believe that if they maintain long term relationships with client they are able to give them the best care possible.

When I have those patients, those are the patients that would have more potential for change that I would tend not to give away or try to see myself if I got too busy. I have to be the one to see them because, not to say that I'm any better than anyone else, but because I know them so well that I can perceive changes in status more easily than a nurse that's never seen them. You know if you go to see someone and their leg is swollen and you never have seen this person before you might tend to just believe that their legs are always like that. You don't have really a baseline to compare it to.

I also have to think about, in this particular case, I don't want to send a lot of different nurses in if my schedule is too full, so this would be a patient that I would give away only as a last resort. Because they have developed a rapport with me that they wouldn't have with other people and that someone else coming in would obviously not know the total situation and may make some decisions that wouldn't be quite right at this time for this person.
I was on maternity leave so another nurse saw this patient who she didn’t know and didn’t know the family background and all that and went in and looked at what this guy was eating and just had a fit. He was eating bucket meals and frozen dinners. He’s supposed to be on a low-sodium diet. Well, I’ve been working with this guy for a couple of years and he’s not going to change. He knows what he’s supposed to eat but ... there’s certain things he will eat and certain things he won’t. We’ve discussed this so I know. She got on the phone and immediately called the family and got them all upset. Because I had been in there long enough – we’d gone through this whole thing all before, I knew there was no need to even discuss the low-sodium diet with him because it didn’t matter.

When the experts did not know clients for any length of time they perceived that the short duration of the client-nurse relationship affected the clinical judgments they made and also the process of making the clinical judgments.

Another example would be the guy I just came from now who’s got elevated blood pressure, chest pain last night, with no history of chest pain. I’ve only seen him twice. I don’t know him very well. The doctor didn’t want to see him until next week, but I made him an appointment for today anyway. His daughter is very concerned. Maybe I listened to the family more then, because the family knows the patient and the daughter was concerned. The patient had never had chest pain before and I’ll try to get more input from other people more than I probably would if I had known the patient very well myself.
If it’s a person you don’t know very well, you probably do [consciously think about how you made the judgment] as opposed to someone you’ve known for months or years.

If it’s somebody you’ve been seeing for months, you kind of know what’s going on and what’s normal for them so the process of making the decision is much quicker than if they give you a visit that is somebody else’s patient and it’s somebody you’ve never seen before and you go out and they have, or appear to have a lot of changes. You have to look through the chart and see what’s going on, ask the patient more questions, and maybe call the doctor. You just don’t have the background to go on. Sometimes you have to ask the doctor, or the doctor’s nurse more questions to really get the picture.

I think if you know someone very well, you don’t necessarily rely on as much objective data whereas if you don’t know the person, I think you would tend to pay more attention.

When you first go into a home, you have no idea if these people are going to be compliant or what they want to learn and what they’re willing to learn.

I think, too, when it’s the first time you’ve seen a patient, [I might say], “how long have your legs been this swollen?” Or your questions might be a little different whereas if I had just seen that patient I might say, “oh, a lot of swelling in your legs that wasn’t there last time,” or, “what’s different?”

I think you’re more conscious of what you need to know; what’s different, do you need to try and get a hold of someone that’s seen this person before? Do you need to really research through the chart to see if that’s ever been noticed before? Would you be more likely to error [sic] on the side of caution and check with the physician and
say, "this is the first time I've seen her or him and this is what I noticed.
I think you're just a little more conscious of the process [of making clinical judgments.]

Community Resources

Another issue described by the expert public health nurses was the community resources available to clients such as home health aides, supplemental feeding programs, public housing projects, and elderly outreach programs. The key respondent's knowledge of appropriate community resources helped them to determine how to provide the best care for their clients.

I think a knowledge of resources is so important. In spite of all the social programs we have, there's nothing that ties it all together. A lot of times I've had people come from hospitals, even from [the county hospital] and no one has helped them or told them they were eligible for this or that. Usually they're just so grateful to find out they can get help.

I have another case where a little girl got her foot run over by the school bus. She had an injury to her foot and they ended up amputating her toes, and this is a 12 year old. When I got into the house--this is right down on the river--they had a dirt basement, the basement was washed out. Somebody had come in and put a new furnace in for them, which they had to pay for themselves. They had six kids between the ages of three and nineteen. The youngest one had a cleft palate but he had never been to speech therapy, never been referred to the school system, even though they have these other five kids within the
school system and you couldn't understand a thing he said. I found out that if they're over three they go to the school they would go to, so I called [the local school] and they came out and did an assessment on him and he probably is going to get some speech therapy and some preschool. Also, [a co-worker's husband] works with flood victims so this family was able to hook up with him so somehow through the grace of God, he's got money to put in a new basement for these people. I guess I see the miracle that happens in things like that when you think how could this little girl get run over by a bus -- that's one bad thing but all the good things that did come out of that. These people just don't have the savvy to go out and get what they need. They don't really understand that you have to be persistent and keep going back or to even find out what they're eligible for.

**Summary**

This theme described the issues that have an impact on the clinical judgments made by expert public health nurses. Characteristics of the clients, such as their reliability as historians, their ability to be responsible for their own health care, and their non-verbal communication can play a part in the clinical judgments made by the expert public health nurses. The experts discussed their need to take risks when they believed clients were in danger.

The importance of the relationship that the expert public health nurses had with the client was reflected in this theme. The nurses made choices to protect and
maintain the long standing relationships they had with clients. The examples that were given illustrated that the process of making clinical judgments was dependent on the duration of the relationship that the expert public health nurses had with the clients.

The expert public health nurses gave examples of how community resources played a role in making clinical judgments. Knowledge of appropriate community resources was an important issue in determining the best clinical judgment for the client.

Clinical Judgment Process

The theme of clinical judgment process is composed of two categories: 1) making clinical judgments, and 2) intuition. The descriptions that follow relate how clinical judgments are made and how intuition is used as expert public health nurses make clinical judgments.

Making Clinical Judgments

The expert public health nurses were asked to reflect on the clinical judgments they made while working with clients in their homes and to describe how they made these clinical judgments.
I would say, you know, you just gather through your senses, see what's going on, see how you feel about it, check the emotional level in the home. You look at the total situation and make a decision based on what you see or observe.

Well, basically you think about what kind of symptoms you're seeing and what his vital signs look like and how serious the situation is, how he looks as far as how severe the respiratory status is to determine if it's something that needs to be seen immediately or if it's something that can wait until an appointment.

Well, usually, I'll try to pick up on something that I am questioning. Then I go back and review in my mind -- has this ever happened with this patient before? Have they ever had a past history of anything like this? If there hasn't been, I guess I go on to the next step, how long has it been going on, that sort of thing? And then probably the next step is, how important is this? Do I take it further or do I just make a note of it and remember to think of it next time I visit and then if I decide to go on to the next step, then you have to make contact with whoever needs to be contacted. It's usually -- I go backward a little bit first and then go on through.

They [nursing faculty] tell you to assess and plan and intervene and then evaluate. Which is, if you break it down, the way you make any decision, really.

It's [the process] not something where you can sit down and get a list and say, these are the things you can use. I don't know that it necessarily works that way.

Like, what are the facts? What are the choices? What are we going to do about this? This is the problem; what are we
going to do about it? and then how did it work?

All of the expert public health nurses related that they did not consciously think about a process of making clinical judgments when they were making the clinical judgments. Instead, they perceived that it was something they just performed.

I don’t think you consciously think about that. It’s a process you know, you just do it unconsciously and sometimes it’s quicker and sometimes it’s longer.

I think for most people that do their jobs and do it well, a lot of it is -- you don’t consciously think, what are the facts, and weigh things out.

I don’t know if there’s a point that you learn to stop and think about what you’re doing.

I don’t think you consciously think of it, think about it. At least I don’t.

It’s not something you formally think out in most cases.

I think we all make the clinical judgments, we just didn’t know quite how we made them.

When asked the length of time it took to make clinical judgments during home visits with their clients, these were their responses.

They’re made right then. Within the bottom-line interview with the patient which sometimes is about a half an hour -- within a half an hour I’ve decided whether or not it’s something that needs to be reported,
something I need to keep an eye on, or something that just is going to be OK.

Probably five to ten minutes. It took longer for the communication than it did for the actual judgment.

The ones that have to do with child protective kind of issues, those sometimes take several weeks, or two or three visits at least to try to gather more information, get a solid enough background to do something.

It depends on what type it is; some of them come quickly and some don't.

All of the expert public health nurses talked about how their processes of making clinical judgments have changed over the years.

I slow down, I step back from the situation and I try to think more about the total picture and more options.

It seems like I take longer; I make quick decisions but I'll step back and I'm not so rash.

As time goes on you kind of get a better understanding of what kinds of things you need to know about and I think I can ask a lot better questions and get a lot better information than I could ten years ago.

I think it’s changed a little because I think in the beginning before you have a lot of experience as a nurse and as an adult, you don’t know as much about what information to gather in certain instances.

Just your observation skills improve over the years. Looking around at the home situation and watching the patient a little more closely, just when they’re walking and doing things and picking up more about their mental status and things like that.
I think it's better because I have better knowledge of what else is available and I'm still learning things.

I'm sure it's changed as I practiced, because you become more confident with yourself and more experienced.

As far as like maternal child health things. I think that's one thing that over the years, I have just become more laid back about and you need to be.

Things are not so cut and dried and people survive.

I think you get better, too, at just assessing the whole situation like when you're first a nurse and you're learning physical assessment and you stop and think about what is the rate, rhythm, color, and you're thinking about all these things consciously and now you just do it like that, you just do it.

I don't think things are quite so black and white anymore. When you're younger its - this is right and this is wrong.

The key respondents discussed the following when asked about why these changes occurred in the ways they made clinical judgments.

The more you’re exposed to, the more situations you’re used to and the knowledge that you have -- and I suppose part of it is with age and maturity, too. Things don’t bother you like they used to.

I think working in the inner-city helps because we get exposed to so much more. You’re in some of the areas where middle class type people, maybe the type of people you grew up with, you never see a lot of that difference and you don’t have to do that.
Intuition

All of the key respondents talked about a concept that they called intuition or a gut feeling. The following are their descriptions of how they use intuition in the clinical judgments they make.

I think, I almost feel like there's just a little warning bell that's going off at first and then the more you look them over you think, oh, yes, we need to do something about this.

I think a lot of it is you just have a feeling that things aren't right for some reason or another. The patient doesn't look well, you don't really see anything in particular but things are telling you they're not looking well or whatever. The best thing to do is to send them in or notify the doctor or do something because to do nothing is worse than doing something, even if there's nothing wrong. You're better off to do something about it than to sit back and say, golly, I should have been more aggressive and done something.

I really believe that intuition plays a part in nursing as in any aspect of a person's life. You just kind of develop a sense of something's wrong or everything's going to be OK. That's what works for me. I seem to depend on it some. You know you're doing something totally different and you think, I need to call this person, or something's not right and a lot of times it isn't. There's a basis for that.

I'd say I pay attention to it [intuition] because I may have looked the person over, but I don't feel quite right about him
and I may go back the next time and there’s something there I see.

I don’t know that it’s always such a conscious thing; sometimes it’s gut -- something is just not right with this patient, even though you maybe can’t put you finger on it.

I believe in it [intuition]. Maybe you’re picking up something that you’re just not aware of.

I think its [intuition] the uneasy feeling about something coupled with some, maybe simple symptoms that ordinarily wouldn’t be enough to alarm you just looking at them individually, but combined with this feeling that something is not right here. I’m not sure it’s intuition or whether you’re picking up on things that you really don’t have words for or any way to report in a clinical way, and so I do believe in that but I don’t think I usually act on intuition alone when I make a decision.

If you follow your gut feeling, usually it’s pretty right.

[You] need to learn to be sensitive to that part of yourself that’s telling you that... sometimes you just walk in the door and you can tell something’s wrong.

Summary

The expert public health nurses related how they made clinical judgments, and each nurse used a different process. Some of the processes described in making clinical judgments had a step-by-step focus and others had a back and forth approach. The key respondents had difficulty describing the process and talked about how
they did not consciously think about the process, they just did it.

The process of how they make clinical judgments has changed over the years for all of the expert public health nurses. Because of their maturity and experience, the skills they use to make clinical judgments have improved.

Intuition was used by all the key respondents as they made clinical judgments. The examples they gave described how they have learned to respect the intuitive side of themselves.

**Learning to be an Expert**

The theme of learning to be an expert includes three categories: 1) learning from experience; 2) commitment; 3) teaching others to make clinical judgments; and 4) teaching others to be expert public health nurses.

**Learning From Experience**

In this category, the ways in which the expert public health nurses learned to make clinical judgments and the importance of their past experiences in learning how to make those clinical judgments are described.

The key respondents perceived that they learned to make clinical judgments by having early experience making judgments, and receiving feedback on the outcomes of the clinical judgments they made.
The following responses from the expert public health nurses describes how the early experiences in making judgments helped them to learn how to make clinical judgments.

I think, in life you learn to make judgments from the time you're a kid and if you have good enough luck to have good parents and good teachers that offer you the guidance that you need, I think you probably have a lot of those skills going into nursing school.

Well, I think based on your education. You're taught APIE, (assessment, planning, intervention, and evaluation). I still remember APIE. Really that's how you learn to make most judgments, I think. It's a more outlined way to do it.

It's nurtured through school. It's nurtured through life.

By practice and schooling and studying. Reviewing the literature and looking for signs and symptoms of complications, that's very important because then if you can have solid signs and symptoms, and just knowing how to react, I think that just learning those was very important and knowing the basic med/surg (medical/surgical) symptoms.

The expert public health nurses learned to make clinical judgments by receiving feedback on the outcomes of the judgments they had made. Did they get positive or negative feedback from the family or other professionals working with their clients?
Patient feedback or physician feedback helps a lot. Whether they say, "thanks for calling, we'll see him," or "we don't need to see him." Patient responses, if when you go back they say, "well, I went to the doctor and he didn't do anything, it was a wasted trip." Maybe that wasn't the right decision, but still I'd rather be safe than sorry.

Well, you know, a lot of it is sometimes reinforced if you look at someone and you say this person's got a problem whatever it is, and you send them in to the doctor or you send them in to the hospital and they agree with you or they come up with other things that you had not really focused in on because you're focusing in on one other thing, then that helps reinforce that what you're doing is appropriate and you are coming up with appropriate assessments. Sometimes they don't always agree with you.

If you have good experiences and good outcomes, I think it's just something you develop.

Basically through experience and making some wrong judgments sometimes. I should have done this, or I didn't need to go that far, that sort of thing. Experience.

My first year on the floor (in an institutional setting) and I got good feedback, yes, you did a good job here or --. I got good feedback, the best, I got told when things were right and when I did well.

When you do a really good job on that and the family really appreciated what you did.
The expert public health nurses believed that their past experiences were very important in learning how to make clinical judgments. They used the past experiences they had with a variety of clients to assist them in making clinical judgments with subsequent clients.

But what I do know is that whatever happens, I’ll be able to learn from it (past decisions). It will help me make other decisions.

Hind sight is 20/20. There are times when you wish you could go back and so something differently, so you learn from those experiences. That I see is the most important—learning from your experiences.

I’ve learned more from my patients than I’ll ever learn from books, in a lot of respects.

I guess you’re always learning from your experiences.

Just the actual nursing experience itself, just getting that actual experience, what is normal, what’s abnormal; watching a patient go sour, things like that. You get more of acute experience in the hospital. I think that really helps a lot, having hospital experience is very important.

Just because I have a lot of different experiences in different settings, making quick judgment calls in different situations, so I think having all that past experience helps.
Well, I think just through experience. I think the more you do it, the more knowledge you gain, the more you become more confident in your own ability to make these judgments.

Your experiences with other people, you kind of learn what symptoms to really look for, how critical a situation is and with some people you have to, depending on their history, their health status can change rather dramatically. When they show the symptoms, it's like - yeah, you better go to the doctor. But when these same symptoms are exhibited in someone else, it may be more serious and you should get them there sooner.

Well, I think just through experience you get to recognize something. I've seen this before and it wasn't good so let's move a little faster this time.

Definitely, you're always learning, one patient to the next. I learn from my patients, things that have worked with one patient may work with another, that sort of thing.

I was lucky, actually it wasn't luck. I just travelled around a lot and so I got a lot of varied experiences. In this type of situation, that's what you need because you have so many different cases, so many different types of clients.

Experience, you're used to making those decisions where you've seen previous symptoms or problems like that before so it's easier to make those decisions.

You can get a new patient and think back three or four years ago I had someone who had something similar, or I remember doing that sort of thing before.
Commitment

The aspect of commitment to the profession of nursing was brought up by the key respondents in the group interview. Just having experience wasn't enough to make one an expert public health nurse. The importance of enjoying your work and accepting a professional responsibility to do what needs to be done were identified as vital aspects of being an expert public health nurse.

You also have to like the job. If you don't like the job, you're never going to get good at it. I think that's a lot of it. I can't think of anything worse than going to a job I don't like. I couldn't do that. I think it show in your work performance.

...persistence, this is what I need to get done and by golly I'm going to figure out a way to do it.

Accepting a professional responsibility to identify what needs to get done and doing it.

I love what I do. I feel like this is my job and this is a big part of my life and because it's such a big part, I think I need to be good at it and I think I am good at it.

You're in public health, if you're going to stay in public health and do public health well, you have to have a devotion to that area.

Coming back from leave, people kept saying, it's nice to have you back. I kept thinking, I don't know if it's nice to be back or not. And then
when I went out to see my patients, it's like, yeah, it's nice to be back. After I'd done those visits, because that's what it's all about. That's why we're here.

Teaching Others to Make Clinical Judgments

The expert public health nurses gave the following responses when asked how they would teach others to make clinical judgments. The importance of experience also was discussed in this category.

I don't know that you can tell anyone else, it's like you have to do it to learn it.

It's like explaining to anyone what a nurse does. You watch a nurse go into a room and take a set of vitals. Well, what you can't see is that she's looking at the person's color, she's looking at his level of consciousness, she's looking at all these hundreds of other things constantly and consistently and you only saw her take a set of vitals. It's hard to explain to someone else what nursing is when all they saw you do is go in and take a set of vitals. So much of it happens up here [in your mind].

Like anything else in life, you can tell someone how to ride a bike but until they do it, you can't really say, this is what you need to know.

I would say you'd read the record, maybe talk to the nurse who has seen them previously, go in and make your own physical assessment, talk to the person. Look at all the information you have available to you and then do it.
Well, I guess I'd tell her that first of all, you gather as much information as you can about the condition and other factors that would be involved, medication, stuff like that, then just analyze what factors could be involved in making a change in their condition and then decide if it's significant enough to call the doctor or if there's something you can influence, such as the client not taking medication correctly, stuff like that, that you can make a difference in.

That it's not unlike any clinical judgment she would make anywhere else. All of our nurses that come to work with us are seasoned nurses, I guess you'd say. The observations would not be that different than the observations you would make in the hospital to make a decision, but maybe the resources, the situation, the options, are different.

I guess the best way to do that (teach others to make clinical judgments) is to take them with you or have them relay their experiences back to you, after a home visit. I think that's the best, experience is the best way to learn how to make judgments. You can't, I think it's hard to teach somebody that, I would think.

Teaching Others to be an Expert Public Health Nurse

The following responses were offered as ways to teach other nurses to become expert public health nurses.

I think it just comes with time. The more you draw from your experience, the easier things get for you.
I think you need to review the job over and over, to be non-judgmental, be flexible and be open to different experiences.

You have to learn and you have to get experience and you have to be open in your experience and you have to read.

I think we have to have confidence in our own judgment ability. I don't know if that's something you can just expect someone to have. I think that's something you develop and some people do and some people don't.

I think you have to be kind of calm and laid back. I don't think you can be too intense with people.

I think you just have to do it. I think experience and use your colleagues.

You can't get that (experience) as a student. Ideally it would be nice if you could hook up with somebody and spend time with them and do what they do but that's not really realistic.

Summary

This theme illustrated the importance of experience in developing expertise. All of the key respondents related examples of how their experiences had affected their nursing practice and clinical judgment abilities. They learned to reflect on their past experiences to help them solve current problems.
The category of teaching others to make clinical judgments and to be an expert public health nurse also stressed the importance of gaining experiences in making clinical judgments, rather than telling others how to make the judgments.

In Chapter Five the results are interpreted and discussed in regard to research questions and relevant research literature. Suggestions for further research and the implications of the results for clinical practice and nursing education will be discussed in Chapter six.
CHAPTER FIVE
INTERPRETATION OF THE RESULTS

Introduction

In this chapter, the results that were described through themes in Chapter Four are interpreted within the framework of the research purpose and objectives described earlier in Chapter Three. Parallels are drawn between the study results and prior research findings that were reviewed in Chapter Two and similarities and differences in the findings are determined and discussed.

The purpose of this study was to describe the clinical judgments made by expert public health nurses. Research objectives were as follows: 1) To describe the clinical judgments made by expert public health nurses and the issues they considered when making these judgments, 2) to describe the process of clinical judgment making and the knowledge the expert public health nurses used to make clinical judgments, 3) to describe the perceptions of expert public health nurses regarding the outcomes of their clinical judgments, 4) to describe the influence of their past experiences on the clinical judgments the expert public health nurses make, and 5) to describe the perceptions of expert public health nurses regarding how they learned to make clinical judgments and the best ways
to help others learn to make clinical judgments. Each of the study objectives are considered here according to the findings of the study. Because the key respondents were considered experts in their field, expertise in public health nursing will also be discussed. The chapter concludes with a summary of the interpretation of the study results.

Clinical Judgments and the Issues Considered When Making These Judgments

The expert public health nurses discussed three different types of clinical judgments they made. The first type was deciding to call a physician or make arrangements for a client to see a physician because of changes in the medical status of the client. The second type of clinical judgment described by the key respondents was determining the need for referrals to other community agencies. This required that the nurse be aware of the services available in the community and have the ability to match the clients with the appropriate community resources. The third clinical judgment described by the expert public health nurses was determining the frequency of nursing services to individual clients. This judgment was made independently by the nurse and necessitated a
careful assessment of the needs of the client and family and their need for nursing care.

The examples of clinical judgments described by the key respondents reflected the definition of a clinical judgment developed by Tanner (1993) which stated a clinical judgment include "the ways in which nurses come to understand the problems, issues or concerns of clients/patients, to attend to salient information, and to respond in concerned and involved ways" (p. 17).

The expert public health nurses provided vivid examples of the types of clinical judgments made in their practice that reflected the dynamic nature of the clients that they cared for on a daily basis. Each type of clinical judgment was described in varying complexity.

They characterized some clinical judgments as difficult and some as routine. The difficult clinical judgments dealt with clients in the following situations: 1) clients who had terminal illnesses; 2) clients that needed to be referred to Child Protective or Adult Protective Services because they were suffering from abuse or neglect; 3) clients who had subtle symptoms that the expert nurse was able to assess but had difficulty describing to others; and 4) clients who were experiencing conditions that were new to the expert public health
nurse. These judgments were perceived as difficult because they required the respondent to deal with sensitive interpersonal conflicts with families (such as loss, grief, and role expectations) and with assessment data which required intensive data gathering or was new to her. In contrast the clinical judgments that were characterized as routine by the expert public health nurses were those that were, "purely medical", which they could report the concrete symptoms to the medical provider. The "purely medical" routine judgments were based on objective physical findings that could be described and reported to the medical provider.

Issues that influenced the clinical judgments respondents made included: 1) client characteristics; 2) relationships they had with clients; 3) community resources available to clients; 4) risk taking; and 5) the practice roles and settings of the key respondents.

According to the key respondents, the characteristics of the client that affected clinical judgments were: 1) the client’s reliability as a historian, such as, are they able to tell the public health nurse about their physical and mental status; 2) the client’s ability to be responsible for their own health care, such as, do they
take their medications; and 3) the client's non-verbal communication.

The relationship that the expert public health nurse had established with the client was an important issue in making clinical judgments. With the clients with which they had a long standing relationship, the key respondents were able to recognize a new symptom or subtle change in the client's medical condition. The expert public health nurses believed that they were able to recognize these changes because they had a long standing relationship with the client. They believed that a public health nurse that did not know the client would not be able to recognize any changes in status. Because they believed that they were able to provide the best care for these clients, the experts protected the relationship they had with long standing clients. The relationships were protected by not having other nurses see these clients unless there was no other alternative.

Knowing the client for a brief period of time (one or two home visits) affected the clinical judgments the key respondents made in the following ways: 1) they had to seek information from other sources, such as family members or medical providers; 2) the judgment took longer to make; 3) there was uncertainty about the client's
compliance with health teaching; and 4) the nurses consciously thought about the process of making the clinical judgment. Due to the newness of the relationship with the clients the key respondents needed longer to collect assessment data from various sources and needed to think about the clinical judgment process and the unpredictability of the client's compliance with the clinical judgment. The key respondents described their thinking processes about seeing a client for the first time as, "I think you're more conscious of what you need to know; ... I think you're just a little more conscious of the process [of making clinical judgments]."

These examples of the importance of relationships with clients and their impact on clinical judgments were similar to the theme of knowing the patient described by Tanner, Benner, Chelsa, and Gordon (1993). The research by Tanner et al. (1993) was conducted in a critical care setting and although it did not consider the context of the client's home, many of the nurses' narrative accounts about recognizing subtle symptoms that were needed to make clinical judgments were similar to the key respondents' narrative accounts in this study.

Another issue that played a role in the key respondents' clinical judgments was the community
resources available to clients. The key respondents' knowledge and understanding of community resources affected the clinical judgments made. The expert public health nurses needed to have the ability to match appropriate community resources with the needs of the clients. Information about the services provided, availability, cost, and eligibility were part of the knowledge the expert public health nurses used to make clinical judgments. For example, the key respondents' knowledge about community resources assisted families by providing supplemental income, additional food for the family, and housing improvements.

Risk taking was an issue the key respondents had to consider when making clinical judgments that required clients to go to a doctor's office, clinic, or emergency department. Because of the cost of transportation to an emergency department, the nurse needed to be confident that her decision to send a client to an emergency department or doctor's office was accurate. If the visit to the doctor's office or emergency department was not deemed necessary by the medical provider, the client was reluctant to follow through with the nurses' advice in future home visits. Some key respondents described the issue of risk taking as, "If you make an error in
judgment, it will undermine your credibility with that person." "The next time you want them to go be checked, they say, the last time they sent me home."

The key respondents' practice roles and settings were also issues affecting clinical judgments. The practice roles that influenced clinical judgments were: 1) the flexibility of the role of a public health nurse; 2) the role expectations; and 3) the role of accepting clients. The practice setting issues included: 1) the need to be a generalist; and 2) the autonomy required in the practice setting.

The flexibility of the nurse's practice role was an influential issue in clinical judgments made by the expert public health nurses. There was no standard format in the working days of the key respondents. They were able to develop and control a work pattern that was the most efficient and comfortable for each of them. This flexibility allowed them to make accommodations in their work day if they needed more time to make a clinical judgment, or to increase the frequency of their home visits with a challenging client.

Another issue in making clinical judgments included the role expectation of the expert public health nurses. Making clinical judgments was part of the expected role of
public health nurses. The expectation of the agency was that the public health nurses make clinical judgments as part of their role in managing cases and evaluating the client's nursing needs.

The role of being accepting of clients was seen by the key respondents as essential in making clinical judgments. Having a non-judgmental attitude assisted the key respondents in data collection and encouraged the clients to be honest with the key respondents. Each of the key respondents described how she had learned through experience that it was beneficial to be non-judgmental with clients in order to assist them in achieving their optimal health status. As one of the key respondents explained, "I think being open is very important. You get people to talk to you more honestly that way if you're non-threatening to them because you can't help them if they don't talk with you honestly."

The practice settings for the key respondents also affected the clinical judgments made. Unlike an institutional setting, a public health nursing setting requires a generalist rather than a specialist nursing practice, and provides continuous instead of episodic care to clients. One key respondent stated that public health nursing is, "more holistic,...offers a broader base and
also more opportunity for intervention than you would [have] in a clinic or hospital."

The autonomous nature of their practice reflected their independent judgment making and was an issue they considered when making clinical judgments. The expert public health nurses made clinical judgments alone, unlike in other settings where the nurse was able to consult with other nurses and health care professionals before making a clinical judgment. Because the key respondents had to make clinical judgments without collaboration from other health care professionals they would "err on the side of caution" and refer their clients to medical providers if they were not able to make an independent clinical judgment.

Tanner (1993), Benner (1984), and Benner and Tanner (1987) discussed the importance of context in making clinical judgments. Tanner (1993) stated, "...that judgment can only occur in the context of a particular situation, where meaningful aspects simply stand out as important and where the choice of responses is guided by the nurses' interpretation of the situation (p. 27)." In this study the context was an essential part of the clinical judgment. The key respondents had to consider the context of the client's home environment, lifestyle, and the services available in the community as well as the
context of the practice roles of the public health nurse. The context of the clinical situation was included in the knowledge needed to make the clinical judgments. Examples of the context of the clinical situation included if clients have the financial resources to obtain necessary medications and equipment, and transportation to appointments.

The Process and Knowledge used to Make Clinical Judgments

The clinical judgment processes the key respondents described were all slightly different from one another. Some key respondents described the clinical judgment making process as examining the whole situation and then making a judgment. One key respondent, who did not believe the process could be broken down in steps, stated, "It's not something where you can sit down and get a list and say, these are the things you can use." Other key respondents identified steps, such as reviewing the past history of a client, identification of symptoms, the duration of those symptoms, and the severity of the symptoms. The steps were not discrete and there was some overlap in the steps. The step by step approach was not linear, but was used in a back and forth manner. One key respondent described the sequence of the step process as,
"I go backward a little bit first and then go on through." According to the key respondents the process of making clinical judgments had changed over the years. They had developed better communication and observation skills and viewed clinical situations from a broader lens. The key respondents attributed these changes to maturity and exposure to clients from varying cultures and economic levels. The consequences of these changes for clinical judgments were: 1) increased confidence in the clinical judgments made; 2) greater understanding of the assessment needed to make a clinical judgment; and 3) clinical judgments that incorporated the values of the client's lifestyle rather than the values of the nurse's lifestyle.

Each of the key respondents had difficulty describing the process of making clinical judgments. All of the key respondents believed that they did not think about the process of making clinical judgments, they just made the judgment. One of the key respondents described the process of making clinical judgments as, "I think we all make the clinical judgments, we just don't know quite how we make them."

Benner and Tanner (1987) reported this same result in their study of how experts used intuition. They described the process of making the clinical judgment without
thinking about the process as, "skilled know how" and was composed of the nurse considering several possibilities in making the clinical judgment and being unable to describe in words how the clinical judgment was made. Experts looked at the clinical situation as a whole, rather than an accumulation of cues or elements and had difficulty breaking down the clinical situation into parts or cues that could be related (Benner and Tanner, 1987). The experts in this study were not able to break down the clinical judgments made into discrete parts; instead they perceived the situation as a whole and developed a clinical judgment without being able to describe how they thought about the process of making the clinical judgment.

Intuition played a role in the clinical judgment process for all of the key respondents. Each of them described situations where they, "just have a feeling that things aren't right for some reason." The key respondents believed that nurses needed to develop and be sensitive to the intuitive side of themselves and to respect the role of intuition in making clinical judgments. Benner (1984) described this phenomenon as the nurses' use of practical knowledge, which is often tacit, based on past experiences, and dependent on the context of the clinical situation. The expert public health nurses also discussed
the use of intuition with their long standing clients. They acted on their intuitive feelings with these clients even when there wasn't adequate objective evidence to make the clinical judgment. They believed that they did not consciously think about the clinical judgment making process when working with clients with which they had a long standing relationship.

**Outcomes of Clinical Judgments**

The key respondents described and perceived the outcomes of the clinical judgments they made in three categories: 1) outcomes that were positive; 2) outcomes that were negative; and 3) outcomes that were ambiguous. Positive outcomes were those that resulted in a positive change in the client's health; interventions the nurse had suggested were successful. An outcome was also perceived as positive when a medical provider agreed with the clinical judgment made by the expert public health nurse and a change was made in the client's medical regime.

Outcomes perceived as negative included a client's unexpected death after a home visit by the key respondent or a decline in a client's health following a clinical judgment.

When no certainty was possible that the clinical judgment was effective, the key respondents perceived the
outcome as ambiguous. There might be an extended period of time before the key respondents obtained feedback about the clinical judgments that were made. The key respondents agreed that they had to make the best clinical judgments with the information they had available at the time of the judgment and, "second guessing yourself can get to be undermining."

The outcomes of clinical judgments were used by the key respondents in making future clinical judgments. The outcomes were an evaluation strategy for the experts as they made clinical judgments. If there was an outcome as a result of the nurse's intervention, the expert would incorporate the knowledge gained in that experience to other similar clinical situations.

Influence of Past Experiences on Clinical Judgments

The importance of past experiences was emphasized by all the key respondents as a method for developing and improving clinical judgments. They believed that all clinical judgments provided them with learning opportunities, regardless of the outcome. The key respondents utilized their past experiences with clients and clinical judgments by applying knowledge gained from a past experience in a current clinical situation. Past experiences that were described as helpful to the key
respondents were those that: 1) provided the most variety of client conditions; and variety of settings (both in the community and in institutional settings); and 2) provided the opportunity to witness the outcomes of various clinical judgments. The ability to recognize subtle symptoms and changes in condition were credited to past experiences in diverse settings. Past experience in a diversity of settings was seen as necessary for public health nurses because they must work with many different types of clients in a variety of settings.

The descriptions of the use of their past experiences by the key respondents corresponded with Benner’s research findings that the knowledge to make clinical judgments is embedded in practice and derived from past experiences with similar and dissimilar clinical situations (Benner, 1984). The expert public health nurses were able to perceive clients through the lens of their previous experiences, or as Benner and Tanner (1987) and Dreyfus and Dreyfus (1986) described it, as the expert’s use of similarity recognition in making intuitive judgments. Similarity recognition is the ability to recognize resemblances or differences in past and current clinical situations. The nurse recognizes that this client reminds her of similar client and she initiates a pattern of
inquiry from the lens of her past experiences (Benner and Tanner, 1987).

Learning to Make Clinical Judgments and Teaching Others to Make Clinical Judgments

The key respondents learned to make clinical judgments in the following ways: 1) early experience in making judgments; and 2) feedback on the outcomes of the clinical judgments they made. The opportunity to make judgments in nursing school helped to develop their judgment making style by practicing making clinical judgments and receiving feedback from faculty members. Feedback on the outcomes of the clinical judgments they had made was also seen as an important learning tool. Positive feedback from clients and other health care professionals helped to validate that the clinical judgments they had made were appropriate. The key respondents also learned to make clinical judgments by reflecting on the feedback regarding clinical judgments that they perceived were ineffective and tried to use those experiences to change the clinical judgments they make in the future.

The key respondents offered the following methods for teaching others how to make clinical judgments. The learner needed to accomplish the following: 1) have
experience making clinical judgments; 2) look at clients as a whole, rather than examining discrete parts of the assessment; and 3) learn from their clinical experiences by talking with an expert about the clinical situations encountered and how the expert might approach the issues encountered in the home visit. The key respondents believed it was difficult to teach someone to make clinical judgments. One of the respondents lamented, "I don't know if you can tell anyone else, it's like you have to do it to learn it." Experience in making judgments was seen as the best way to learn how to make clinical judgments. Spending time with an expert public health nurse and discussing the clinical judgments that she made also was a valuable method of teaching the art of clinical judgments. Benner and Tanner (1987), Carlson-Catalano (1992) and McMurray (1992) advocated the use of analyzing the clinical judgments that were made by experts to assist novices and students in learning how to make clinical judgments. By examining the clinical judgments made by experts, the novices and students could gain experience in how the judgments were made and how the expert synthesized the data collected about the client in order to make the clinical judgments.
Expertise in Public Health Nursing

Because all of the key respondents were identified as expert public health nurses, it is important to discuss how they become experts and how to teach others to be expert public health nurses. The two methods that were perceived as important in becoming an expert were experience and commitment. Experience in a variety of clinical situations and using past experiences to assist with current clinical situations were seen as an essential component in developing expertise.

Although experience was seen as a vital ingredient in becoming as expert public health nurse, it was not the only ingredient. Commitment to the nursing profession was also needed in order to be an expert. Commitment was described as: 1) enjoyment of the professional work; and 2) professional responsibility in doing the work.

The key respondents offered the following methods to teach other public health nurses to be experts: 1) learn from their clinical experiences; 2) be non-judgmental with clients; 3) be flexible; and 4) be open to different experiences.

In Chapter Six, conclusions are made about the study and recommendations are given for nursing practice,
education, and further research in the area of clinical judgment.
CHAPTER SIX
CONCLUSIONS AND RECOMMENDATIONS

This chapter includes the discussion of the conclusions of the study findings. Recommendations for nursing practice and education are presented, followed by recommendations for further research in the realm of clinical judgments.

Conclusions

What can be said about the experiences of clinical judgment making by expert public health nurses?

1. The context of the clinical situation is an important issue for expert public health nurses in making clinical judgments. The expert public health nurses have to consider the context of the client's home environment, lifestyle, and the services available in the community all within the context of the public health nursing practice roles. Part of the role of the public health nurse is to make autonomous judgments in client's homes. The clients they care for have a variety of health conditions and are of varying ages, therefore requiring the public health nurses to be generalists. The process of making the clinical judgment is tied to the context of the situation in the client's home.
2. **The process that experts use to make clinical judgments is difficult to describe in words, they "just do it."** All of the expert public health nurses had difficulty expressing the clinical judgment process in words. The expert public health nurses described the process they used to make clinical judgments in various ways. Some believed that the process could not be broken down into steps. Others described overlapping steps that had a back and forth sequence. The expert public health nurses descriptions of the clinical judgment process were similar to those described by Pyles and Stern (1983) as the "nursing gestalt." The nursing gestalt consisted of the nurse's knowledge, experiences, identifying client cues, and intuition together to develop the clinical judgment. All of the above issues come together to form the clinical judgment.

3. **Experts use intuitive knowledge in making clinical judgments.** All of the key respondents perceived that intuition played a role in how they made clinical judgments. When they had an intuitive feeling about a client's condition, they acted on that intuitive response. They respected the intuitive feelings they had about clients and believed that it was important to be sensitive to the intuitive side of themselves. They used their
intuition to guide the clinical judgments they made. Experience in clinical situations was seen as a route to developing intuition.

4. **Clinical judgments and the process of making clinical judgments are affected by the relationship the nurse has with the client.** Expert public health nurses who had a long standing relationship with clients were able to recognize subtle changes in their client's condition that they believed would be difficult for other nurses to recognize. With these clients, they did not consciously think about the clinical judgment making process. However, with clients they did not know, the nurses thought about the process of making the clinical judgment, the judgment took longer to make, there was more uncertainty about the client's behavior, and the nurses used additional data sources to collect information.

5. **Experts use their past experiences to make clinical judgments in current client situations.** The clinical judgments made by the expert public health nurses were seen as learning opportunities. They applied the knowledge learned from past experiences to current clinical situations. The past experiences that were perceived as the most helpful were those that provided the most variety of client conditions and settings, and were
situations where the expert public health nurses were able to observe the outcomes of the judgments that were made.

6. **Experience in making clinical judgments and analyzing the clinical judgments of experts are valuable ways to learn to make clinical judgments.** Clinical experience was seen as the key to learning to make clinical judgments. Making clinical judgments and receiving and reflecting on feedback from the judgments were perceived as the most helpful learning methods. Spending time with expert public health nurses as they make clinical judgments and discussing those judgments was reported as a way to help others learn the skill of making clinical judgments.

7. **The respondent’s perceptions of the outcomes of clinical judgments are determined by the feedback received from clients or other health professionals.** The outcomes of clinical judgments were identified as positive, negative, or ambiguous. The expert public health nurses believed that the outcomes were determined by the changes in the client’s mental or physical condition.

**Recommendations for Nursing Education**

Recommendations are made for nursing education which they may want to consider after reading this study. These
recommendation are applicable for teaching in all areas of nursing education.

1. **The use of case studies as a method of teaching clinical judgment making.** The key respondents in this study believed that experience in making clinical judgments and examining the clinical judgments made by experts would be a useful approach in teaching others to make clinical judgments. Case studies would provide actual client information that the nursing students could use to make clinical judgments without jeopardizing client outcomes. Several alternative clinical judgments could be developed by nursing students using the clinical examples given by the key respondents in this study. Students could use case studies to analyze and critique the clinical judgments made by experts and gain an understanding of how the judgment was developed.

2. **Consider less emphasis on the rational perspective and more on the intuitive perspective.** Most nursing curriculums emphasize the rational perspective in teaching how to make clinical judgments. The rational perspective provides theoretical knowledge about the process of making clinical judgments and a step by step judgment making process, but the development of intuition is not included. With experience, the nursing students
can start to learn how to be sensitive to their intuitive responses. The key respondents in this study all used intuition in making clinical judgments and have learned to listen to the intuitive feelings they have about clients. Because intuitive actions do not have a logical rationale, educators are often uncomfortable talking about the existence of intuition and how it is used in clinical situations.

3. **Include additional content in the nursing curriculum on building relationships with clients and learning how to respect clients.** Because this was an important issue for the expert public health nurses, it warrants additional time in the nursing curriculum. It is common in many nursing clinical rotations to change clients each day or week in order to provide the nursing student with more variety of clients and health conditions. Educators may want to consider having the nursing student assigned to the same client over a period of time in order to develop a long term relationship with that client. The nursing students could experience "knowing the client" and how that knowledge affects the judgments and care they provide to the client.

4. **Implement an internship program where the student nurse works with an expert public health nurse.** The expert
would be able to explain how she made clinical judgments and help the nursing student to recognize subtle changes and nuances in a client's condition.

5. **Incorporate the use of technology in teaching students how to make clinical judgments.** Through the use of virtual reality, students could experience the context of a home visit and make clinical judgments based on the data presented. Students could discuss the clinical judgments they have made via computer bulletin boards and seek feedback from experts in a particular field of nursing. Case studies could be presented by interactive technologies and students could experience the outcomes of the clinical judgments they made.

**Recommendations for Nursing Practice**

The following recommendations may be useful for administrators of public health nursing agencies in assisting their nursing staff in developing expertise in making clinical judgments.

1. **Revise orientation programs for new public health nurses to include time for discussion and reflection of clinical judgments.** The key respondents in this study believed that talking with experienced public health nurses about the clinical judgments made during home
visits was an important way to learn how to make clinical judgments in a public health nursing practice setting.

2. **Encourage expert public health nurses to share their clinical experiences in making clinical judgments with others.** Learning from each other was one of the methods used by the key respondents in this study to enhance the knowledge and skill they needed to make clinical judgments.

3. **Recognize the importance of clinical judgment making and support efforts to improve the skills of the nursing staff.** Making accurate clinical judgments affects the quality of care given to clients. When accurate judgments are made, the clients receive the care they need in a timely manner, which could reduce the number of home visits needed and, therefore, reduce health care costs.

**Recommendations for Further Research**

The following questions were generated by this study and may be useful to others interested in research in the area of clinical judgment.

1. What are novice public health nurses’ perceptions of clinical judgments, issues surrounding the judgments, and the process of making clinical judgments?

2. How do novices become expert public health nurses? What kinds of support do they need?
3. What are the perceptions of expert public health nurses about the institutional resources or impediments to the development of expertise in clinical judgment making.

4. What are the perceptions of expert public health nurses about how intuition is developed, how it is used, and the consequences of using intuition in making clinical judgments?

5. How do student nurses learn about making clinical judgments? What teaching methods enhance their skill in making clinical judgments?

6. How does a nurses' commitment to the profession affect the development of expertise? How do nurses develop a commitment to the profession?

7. How does the public health nurses' cultural background influence the clinical judgments made and the process of making clinical judgments?

8. How does gender influence clinical judgment making? Do male public health nurses make clinical judgments differently than female public health nurses?

Concluding Thoughts

If clinical judgments are the most important aspect of nursing practice (del Bueno, 1990) and essential to the health of clients, the ways in which student nurses are taught to make clinical judgments should be of importance
to nursing educators. This study portrayed the experiences of six expert public health nurses as they made clinical judgments in order to promote an understanding of the process of making clinical judgments and the methods to foster the development of expertise in this area.
REFERENCES


January 21, 1994

Dear Expert Public Health Nurse,

I am a doctoral student in Professional Studies in Education at Iowa State University and am starting to collect data for my dissertation. My study is about how expert public health nurses go about making clinical judgments.

I am writing to ask for your participation in my study. Expert nurses will be involved in four individual and one group interview. The interviews will be audiotaped and will be approximately sixty to ninety minutes in length. I anticipate that the interviews will start in February, 1994 and conclude in June, 1994.

Confidentiality of the data from the interviews will be maintained. Each participant's name will be separated from the transcription of the interview, which will be given a code number. The participant's name and corresponding code number will be known only to the investigator and will be destroyed at the completion of the study.

If you are willing, I would like to meet with you to discuss your participation in my research. I will be contacting you soon to set up an appointment to visit with you. If you have any questions about the study, please contact me at 263-2854 (office) or 685-3642 (home).

I'm looking forward to talking with you.

Sincerely,

Beth B. Gaul
APPENDIX B

RESEARCH CONSENT FORM

I, ________________________, agree to participate in this research study according to the following terms:

1. The information obtained during this study will be used in a dissertation and will be read by the respondents, six faculty members on the investigator's dissertation committee, and one other person solicited by the investigator to check the data.

2. Real names will not be used in the dissertation.

3. The respondent will review the dissertation before the writing of the final draft and will negotiate changes with the investigator.

4. The respondent's participation in this study is voluntary and the respondent may withdraw from this study at any time by arrangement with the investigator.

__________________________________________
Respondent
Date

I do not grant permission to be quoted directly in the study report. (please circle)

__________________________________________
Respondent
Date

I agree to conduct and report this research according to the preceding terms.

__________________________________________
Investigator
Date
APPENDIX C

DOCUMENT SUMMARY FORM

Date:
Source of document:

Name or description of document:

Interview with which document is associated:

Significance of document:

Summary of contents of document:

Questions generated by the document:
APPENDIX D
INTERVIEW SUMMARY FORM

Respondent Number: Type of interview:  

Interview Number:  

Date:  

1. What were the main issues or themes that struck you in this interview?  

2. Summarize the information obtained on each of the questions for this interview.  

3. What else struck you as salient, interesting, illuminating or important in this interview?  

4. What new or remaining questions should be considered for the next interview?
APPENDIX E
CATEGORIES (SET 1)

01. Choice: nursing career
02. Career: professional experience
03. Choice: higher education
04. Practice setting (PS): assignments
05. PS: typical work day
06. Clinical judgments (CJ): need for medical F/U
07. CJ: referrals to community agencies
08. CJ: frequency of home visits
09. CJ: examples
10. Factors in making CJ
11. CJ: data gathering
12. Feelings when making CJ
13. CJ: skills needed
14. CJ: difficult
15. CJ: routine
16. CJ: documentation
17. Length of time to make CJ
18. Learning to make CJ
19. Teaching others to make CJ
20. CJ factors: risk taking
21. CJ: calling the Dr.
22. CJ process
23. CJ process: unconscious
24. Building rapport
25. CJ factor: Long r/ship
26. CJ factor: No r/ship
27. CJ factor: Protecting and maintaining r/ship
28. Difficult client: Can’t do anymore
29. Client outcomes: +
30. Client outcomes: -
31. Client outcomes: ambiguous
32. Client outcomes: uncontrollable
34. Characteristics of expert: nurse
35. Prerequisites to becoming an expert
36. How to be an expert
37. Role of expert: Beck and call girl
38. CJ: experience as teacher
39. CJ factor: community resources
40. Learning about resources
41. Clients in control
42. Encouraging client autonomy
43. Involvement: When to butt in
44. Involvement: When to back off
45. Changes in cj process over time
46. Causes of changes in cj process
47. Practice: HS call
48. Practice setting anxiety
49. Nurses knowing clients
50. Practice: The easy way
51: Practice: Not the easy way
52: Practice: Client teaching
53. Use of intuition in making cj
54. Developing intuition
55. Appreciating clients
56. Shoving them back in the drawer
57. Changes in Communication style over time
58. Being accepting
59. Learning to be accepting
60. Being judgmental: - effects
61. Novice PHN
62. Role of the expert as preceptor
63. Experts need for continuing education
64. Learning from peers
65. Loving your job
66. Why being a PHN is fun
67. Autonomous role of PHN
68. Role of PHN: Giving of yourself
69. Frustrating aspects of PHN role
70. Varied roles of PHN
71. PHN role: Professionalism
72. Uniqueness of PHN role
73. Differences: Hospital and community
74. Nursing practice standards
75. VNS: Work environment
76. Evaluation process: nurses perception
77. Perception differences: PHN and admin.
78. Documentation
79. Funding sources
80. Role of PHN: Billing
81. Role of PHN: Being organized
82. PHN perception of supervisory role
83. PHN need for + reinforcement
84. VNS: Staffing
85. Role of PHN: In the office
86. Role of PHN: Out of the office
87. VNS: Governance
88. Difficulty articulating cj process
89. Thinking about the cj process
90. Talking about the cj process
91. Feelings about the group interview
92. Miscellaneous
APPENDIX F
CATEGORIES (SET 2)

01. Career Path
   01. Choice: nursing career
   02. Career: professional experience
   03. Choice: higher education

02. Nursing Practice setting (PS)
   04. Practice setting (PS): assignments
   05. PS: typical work day
   47. Practice: HS call
   48. Practice setting anxiety

03. Clinical judgments (CJ)
   06. CJ: need for medical F/U
   07. CJ: referrals to community agencies
   08. CJ: frequency of home visits
   09. CJ: examples
   14. CJ: difficult
   15. CJ: routine

04. CJ factors
   10. Factors in making CJ
   20. CJ factors: risk taking
   21. CJ: calling the Dr.
   25. CJ factor: long relationship
   49. Nurses knowing clients
26. CJ factor: No r/ship
27. CJ factor: Protecting and maintaining r/ship
39. CJ factor: community resources
79. Funding sources
40. Learning about resources
05. CJ: data gathering
11. CJ: data gathering
06. Feelings when making CJ
12. Feelings when making CJ
07. CJ: skills needed
13. CJ: skills needed
08. CJ: documentation
16. CJ: documentation
09. Length of time to make CJ
17. Length of time to make CJ
10. Learning to make CJ
18. Learning to make CJ
11. Teaching others to make CJ
19. Teaching others to make CJ
12. CJ process
22. CJ process
13. CJ process: unconscious
23. CJ process: unconscious
14. Building rapport
   24. Building rapport

15. Respecting client autonomy
   28. Difficult client: Can’t do anymore
   32. Client outcomes: uncontrollable
   41. Clients in control
   42. Encouraging client autonomy

16. Client outcomes
   29. Client outcomes: +
   30. Client outcomes: -
   31. Client outcomes: ambiguous

17. Qualities of an expert PHN
   34. Characteristics of expert: nurse
   35. Prerequisites to becoming an expert
   36. How to be an expert
   37. Role of expert: Beck and call girl

18. Experience is the teacher
   38. CJ: Experience as teacher

19. Involvement
   43. Involvement: When to butt in
   44. Involvement: When to back off
20. CJ process changes
   45. Changes in cj process over time
   46. Causes of changes in cj process

21. Practice: The easy way
   50. Practice: The easy way

22. Practice: Not the easy way
   51. Practice: Not the easy way

23. Practice: Client teaching
   52. Practice: Client teaching

24. Intuition
   53. Use of intuition in making cj
   54. Developing intuition

25. Appreciating clients
   55. Appreciating clients
   58. Being accepting
   59. Learning to be accepting
   60. Being judgmental: - effects

27. Preceptor role
   61. Novice PHN
   62. Role of the expert as preceptor
28. Experts need for continuing education
   63. Experts need for continuing education
29. Learning from peers
   64. Learning from peers
30. Loving your job
   65. Loving your job
   66. Why being a PHN is fun
31. Autonomous role of PHN
   67. Autonomous role of PHN
32. Role of PHN: Giving of yourself
   68. Role of PHN: Giving of yourself
33. Frustrating aspects of PHN role
   69. Frustrating aspects of PHN role
34. Professional roles of PHN
   70. Varied roles of PHN
   71. PHN role: Professionalism
35. Uniqueness of PHN role
   72. Uniqueness of PHN role
36. Differences: Hospital and community
   73. Differences: Hospital and community
37. Nursing practice standards
   74. Nursing practice standards
38. VNS: Work environment
   75. VNS: Work environment
39. Evaluation process: nurses perception
76. Evaluation process: nurses perception
40. Perception differences: PHN and admin.
77. Perception differences: PHN and admin.
82. PHN perception of supervisory role
41. Documentation
78. Documentation
42. Role of PHN: Billing
80. Role of PHN: Billing
43. Role of PHN: Being organized
81. Role of PHN: Being organized
44. PHN need for + reinforcement
83. PHN need for + reinforcement
45. VNS: Staffing
84. VNS: Staffing
46. Role of PHN: In and out of the office
85. Role of PHN: In the office
86. Role of PHN: Out of the office
47. VNS: Governance
87. VNS: Governance
48. Difficulty articulating CJ process
88. Difficulty articulating CJ process
49. Thinking about the cj process
89. Thinking about the cj process
50. Talking about the cj process
   90. Talking about the cj process

51. Feelings about the group interview
   91. Feelings about the group interview

52. Miscellaneous
APPENDIX G
CATEGORIES (SET 3)

01. Career Path
   01. Choice: nursing career
   02. Career: professional experience
   03. Choice: higher education

02. Nursing Practice setting (PS)
   04. Practice setting (PS): assignments
   05. PS: typical work day
   47. Practice: HS call
   48. Practice setting anxiety

03. Clinical judgments (CJ)
   06. CJ: need for medical F/U
   07. CJ: referrals to community agencies
   08. CJ: frequency of home visits
   09. CJ: examples
   14. CJ: difficult
   15. CJ: routine

04. CJ factors
   10. Factors in making CJ
   20. CJ factors: risk taking
   21. CJ: calling the Dr.
   25. CJ factor: long relationship
   49. Nurses knowing clients
26. CJ factor: No r/ship
27. CJ factor: Protecting and maintaining r/ship
39. CJ factor: community resources
79. Funding sources
40. Learning about resources
05. Teaching others to make CJ
19. Teaching others to make CJ
06. CJ Process
22. CJ process
23. CJ process: unconscious
11. CJ: data gathering
12. Feelings when making CJ
13. CJ: skills needed
16. CJ: documentation
17. Length of time to make CJ
45. Changes in cj process over time
46. Causes of changes in cj process
88. Difficulty articulating cj process
89. Thinking about the cj process
90. Talking about the cj process
91. Feelings about the group interview
07. Respecting client autonomy
   28. Difficult client: Can’t do anymore
   32. Client outcomes: uncontrollable
   41. Clients in control
   42. Encouraging client autonomy
   52. Practice: Client teaching

08. Client outcomes
   29. Client outcomes: +
   30. Client outcomes: -
   31. Client outcomes: ambiguous

09. Qualities of an expert PHN
   34. Characteristics of expert: nurse
   35. Prerequisites to becoming an expert
   36. How to be an expert
   37. Role of expert: Beck and call girl
   63. Experts need for continuing education
   64. Learning from peers

10. Experience is the teacher
   18. Learning to make CJ
   38. CJ: Experience as teacher

11. Involvement
   43. Involvement: When to butt in
   44. Involvement: When to back off
12. Practice Roles
   50. Practice: The easy way
   51. Practice: Not the easy way
   52. Practice: Client teaching
   56. Shoving them back in the drawer
   74. Nursing practice standards
   78. Documentation
   80. Role of PHN: Billing
   81. Role of PHN: Being organized

13. Intuition
   53. Use of intuition in making cj
   54. Developing intuition

14. Appreciating clients
   55. Appreciating clients
   58. Being accepting
   59. Learning to be accepting
   60. Being judgmental: - effects
   57. Changes in Communication style over time
   24. Building rapport
   68. Role of PHN: Giving of yourself

15. Preceptor role
   61. Novice PHN
   62. Role of the expert as preceptor
16. Loving your job
   65. Loving your job
   66. Why being a PHN is fun
17. Frustrating aspects of PHN role
   69. Frustrating aspects of PHN role
18. Uniqueness of PHN role
   72. Uniqueness of PHN role
   73. Differences: Hospital and community
   67. Autonomous role of PHN
   70. Varied roles of PHN
   71. PHN role: Professionalism
19. Agency Role in making cj
   75. VNS: Work environment
   76. Evaluation process: nurses perception
   77. Perception differences: PHN and admin.
   82. PHN perception of supervisory role
   84. VNS: Staffing
   87. VNS: Governance
20. PHN need for + reinforcement
   83. PHN need for + reinforcement
21. Role of PHN: In and out of the office
   85. Role of PHN: In the office
   86. Role of PHN: Out of the office
APPENDIX H
CATEGORIES (SET 4)

01. Career Path
   01. Choice: nursing career
   02. Career: professional experience
   03. Choice: higher education

02. Public Health Nursing Roles and Practice setting (PS)
   04. Practice setting (PS): assignments
   05. PS: typical work day
   47. Practice: HS call
   48. Practice setting anxiety
   75. VNS: Work environment
   76. Evaluation process: nurses perception
   77. Perception differences: PHN and admin.
   82. PHN perception of supervisory role
   84. VNS: Staffing
   87. VNS: Governance
   83. PHN need for + reinforcement
   50. Practice: The easy way
   51. Practice: Not the easy way
   52. Practice: Client teaching
   56. Shoving them back in the drawer
   74. Nursing practice standards
78. Documentation
80. Role of PHN: Billing
81. Role of PHN: Being organized
65. Loving your job
66. Why being a PHN is fun
69. Frustrating aspects of PHN role
72. Uniqueness of PHN role
73. Differences: Hospital and community
67. Autonomous role of PHN
70. Varied roles of PHN
71. PHN role: Professionalism
21. Role of PHN: In and out of the office
85. Role of PHN: In the office
86. Role of PHN: Out of the office

03. Clinical judgments (CJ)
06. CJ: need for medical F/U
07. CJ: referrals to community agencies
08. CJ: frequency of home visits
09. CJ: examples
14. CJ: difficult
15. CJ: routine
29. Client outcomes: +
30. Client outcomes: -
31. Client outcomes: ambiguous
04. CJ factors
10. Factors in making CJ
20. CJ factors: risk taking
21. CJ: calling the Dr.
25. CJ factor: long relationship
49. Nurses knowing clients
26. CJ factor: No r/ship
27. CJ factor: Protecting and maintaining r/ship
39. CJ factor: community resources
79. Funding sources
40. Learning about resources

05. CJ Process
22. CJ process
23. CJ process: unconscious
11. CJ: data gathering
12. Feelings when making CJ
13. CJ: skills needed
16. CJ: documentation
17. Length of time to make CJ
45. Changes in cj process over time
46. Causes of changes in cj process
88. Difficulty articulating cj process
89. Thinking about the cj process
90. Talking about the cj process
91. Feelings about the group interview
53. Use of intuition in making cj
54. Developing intuition

06. Respecting clients
28. Difficult client: Can't do anymore
32. Client outcomes: uncontrollable
41. Clients in control
42. Encouraging client autonomy
52. Practice: Client teaching
43. Involvement: When to butt in
44. Involvement: When to back off
55. Appreciating clients
58. Being accepting
59. Learning to be accepting
60. Being judgmental: - effects
57. Changes in Communication style over time
24. Building rapport
68. Role of PHN: Giving of yourself

07. Qualities of an expert PHN
34. Characteristics of expert: nurse
35. Prerequisites to becoming an expert
36. How to be an expert
37. Role of expert: Beck and call girl
63. Experts need for continuing education
64. Learning from peers

08. Experience is the teacher
18. Learning to make CJ
38. CJ: Experience as teacher
19. Teaching others to make CJ
61. Novice PHN
62. Role of the expert as preceptor
APPENDIX I
CATEGORIES (SET 5)

01. Career Path
   A. Career Path (01)

02. Public Health Nursing Roles and Practice setting (PS)
   A. Nursing Practice setting (PS) (02)
      01. Practice setting (PS): assignments
      02. PS: typical work day
      03. Practice: HS call
      04. Practice setting anxiety
   B. Practice Roles (12)
      01. Practice: The easy way
      02. Practice: Not the easy way
      03. Practice: Client teaching
      04. Shoving them back in the drawer
      05. Nursing practice standards
      06. Documentation
      07. Role of PHN: Billing
      08. Role of PHN: Being organized
   C. Uniqueness of PHN role (18)
      01. Uniqueness of PHN role
      02. Differences: Hospital and community
      03. Autonomous role of PHN
04. Varied roles of PHN

05. PHN role: Professionalism

D. Positive and Negative Aspects of the Role

01. Loving your job (16)

02. Frustrating aspects of PHN role (17)

03. PHN need for + reinforcement (20)

E. Role of PHN: In and out of the office (21)

F. Agency Role in making cj (19)

03. Clinical judgments

A. Clinical judgments (CJ) (03)

01. CJ: need for medical F/U

02. CJ: referrals to community agencies

03. CJ: frequency of home visits

04. CJ: examples

05. CJ: difficult and routine

B. Client outcomes (8)

01. +, -, and ambiguous outcomes

04. Clinical judgment factor

A. CJ factors (04)

B. CJ factors: risk taking
C. CJ factor: relationship
   01. CJ factor: long relationship
   02. Nurses knowing clients
   03. CJ factor: No r/ship
   04. CJ factor: Protecting and maintaining r/ship

D. CJ factor: community resources
   01. Funding sources
   02. Learning about resources

05. Clinical judgment process
   A. CJ Process (06)
      01. CJ process
      02. CJ process: unconscious
      03. CJ: skills needed
      04. Length of time to make CJ
      05. Changes in cj process over time
      06. Talking about the cj process
   B. Intuition (13)
      01. Use of intuition in making cj
      02. Developing intuition

06. Respecting Clients
   A. Respecting client autonomy (07)
   B. Involvement (11)
C. Appreciating clients (14)
01. Being accepting
02. Learning to be accepting
03. Being judgmental: - effects
04. Changes in Communication style over time
05. Building rapport

07. Qualities of an expert PHN
A. Qualities of an expert PHN (09)
01. Characteristics of expert: admin.
02. Characteristics of expert: nurse
03. Prerequisites to becoming an expert
04. How to be an expert
05. Role of expert: Beck and call girl
06. Learning need of experts

08. Experience is the teacher
A. Experience is the teacher (10)
01. Learning to make CJ
02. CJ: Experience as teacher

B. Teaching others to make CJ (05)

C. Preceptor role (15)
01. Novice PHN
02. Role of the expert as preceptor
APPENDIX J
CATEGORIES (SET 6)

01. Career Path
   A. Career Path (01)
   B. Qualities of an expert PHN (09)
      01. Characteristics of expert
      02. Learning needs of experts

02. Public Health Nursing Roles and Practice setting (PS)
   A. Nursing Practice setting (PS) (02)
      01. Practice setting (PS): assignments
      02. PS: typical work day
      03. Practice: HS call
      04. Practice setting anxiety
   B. Practice Roles (12)
      01. Nursing practice standards
      02. Practice approaches
      03. Role of PHN: Being organized
      04. Accepting clients
      05. Preceptor role
   C. Uniqueness of PHN role and settings (18)
      01. Differences: Hospital and community
      02. Autonomous role of PHN
      03. Varied roles of PHN
03. Clinical judgments
   A. Clinical judgments (CJ) (03)
      01. CJ: examples
      02. CJ: types
      03. CJ: difficult and routine
   B. Client outcomes (B)
      01. + outcomes
      02. - outcomes
      03. ambiguous outcomes

04. Clinical judgment issues
   A. Client issues (04)
   B. Risk taking
   C. Relationship
      01. Nurses knowing clients
      02. CJ issue: No r/ship
      03. CJ issue: Protecting and maintaining r/ship
   D. Community resources
      01. Funding sources
      02. Learning about resources

05. Clinical judgment process
   A. Making clinical judgments (06)
      01. CJ process
      02. CJ process: unconscious
03. CJ: skills needed
04. Length of time to make CJ
05. Changes in CJ process over time

B. Intuition (13)
01. Use of intuition in making CJ
02. Developing intuition

06. Learning to be an Expert
A. Learning from experience (10)
01. Learning to make CJ
02. Past experiences

B. Commitment

C. Teaching others to make CJ (05)

D. Teaching others to be an expert
01. Career Path
Education, experiences, and choices which influenced the respondent and led to their decision to work as a public health nurse (PHN).

02. Nursing Practice setting (PS)
Description of typical work day, assignments, evening call, and anxiety related to the practice setting.

03. Clinical judgments (CJ)
Descriptions and examples of the types of cj made and the varying difficulty of the clinical judgment.

04. CJ factors
Descriptions of the various factors that are related to making clinical judgments, such as risk taking, community resources, and how relationships with clients play a role in making clinical judgments.

05. Teaching others to make CJ
Descriptions and examples of how to teach others to make clinical judgments.
06. CJ Process
Descriptions and interpretations of the clinical judgment process used by the respondents, including their emotions surrounding the process and ways that the process has changed over time.

07. Respecting client autonomy
Descriptions and examples of how clients are in control of their own health outcomes, how PHN encourage clients to be autonomous, and how the PHN deal with not being in control.

08. Client outcomes
Descriptions and examples of client outcomes of clinical judgments made by the key respondents.

09. Qualities of an expert PHN
Descriptions of the characteristics of an expert, how to be an expert, and the roles of an expert PHN.

10. Experience is the teacher
Descriptions and examples of the importance of in learning how to make clinical judgments.
11. Involvement
Descriptions and examples of involvement with clients.

12. Practice Roles
Descriptions and interpretation of nursing practice roles and standards.

13. Intuition
Descriptions, examples, and interpretation of how intuition plays a role in making clinical judgments.

14. Appreciating clients
Descriptions and examples of how PHN accept clients and how they communicate acceptance.

15. Preceptor role
Descriptions of the role of preceptor and their perceptions of the need of novice nurses.

16. Loving your job
Descriptions and interpretations of how the respondents enjoy their work.

17. Frustrating aspects of PHN role
Descriptions of frustrating aspects of PHN role.
18. Uniqueness of PHN role
   Descriptions and examples of how the PHN role
differs from the role of the nurse in a
hospital setting and the professional
expectations of PHNs.

19. Agency Role in making cj
   Descriptions and interpretations of the role
the agency plays in how PHN make clinical
judgments.

20. PHN need for + reinforcement
   Descriptions of the PHNs need for positive
reinforcement.

21. Role of PHN: In and out of the office
   Descriptions and examples of the perceived
role changes when the PHN are in and out
of the office.
APPENDIX L

KEY RESPONDENT FOLLOW UP LETTER

TO: Expert Public Health Nurses
FROM: Beth Gaul
DATE: July 25, 1994

Attached is a rough draft of the report of results from the study about clinical judgment experiences of expert public health nurses. Thanks so much for your participation in the study and for sharing your insights about clinical judgments with me.

The attached report contains quotations from you about your experiences. Your words were the best way to communicate your meanings and experiences. I would appreciate if you would take some time to read the report and make sure it is an accurate portrayal of your clinical judgment experiences. Please write down any reactions, concerns, or questions that you have, so we can discuss them together. I will be contacting you in two weeks to schedule a time that we can meet to discuss the report. If you have any questions, please contact me at (515) 685-3642.

Thanks for all your time and energy.