Two methods of qualitative inquiry are case method and grounded theory. The two methods will be discussed together because although they have different goals, their roots are in sociology and they employ several of the same strategies for data collection. The goal of case method is to describe a contemporary situation within its real-life context (Stake, 1995; Yin, 2003). The goal of grounded theory is to develop theories that describe or explain particular situations and accurately perceive and present another’s world (Hutchinson, 1993). Both case and grounded theory research methods will be presented and examples provided for use of each in relation to urologic nursing.

Case Method

Case studies are familiar to most nurses. Nurses learned the nursing process using case studies, and you have probably read or heard case presentations at clinical conferences. That familiar case study is similar to, but not the same as, the case research method presented here. Case, as a research method, is an effective research strategy for answering questions that begin with words such as “how” and “why” (Yin, 2003). It is the method of choice when the data to be collected about a situation will come from many sources including people, observation, records, etc. (Yin, 2003). Case method is most useful when the research is focused on a “specific, unique, bounded system” (Stake, 1998, p. 88), and often employs a combination of qualitative and quantitative data collection techniques (Yin, 2003). The focus of the case can be an individual, an event, a family, an organization, or even a place (Mariano, 1995). The uniqueness of case method lies in the focus of the study on the case (Stake, 1998).

A research study can be designed to study a single case, or multiple cases. A single case may be a typical case or it may be something that is unique (Mariano, 1995). For an example of a unique case, consider a client the first author had the opportunity to care for many years ago. An elderly, single male patient had a severe, unrepaired hypospadias. His anatomy was such that the urinary meatus was at the scrotal-penal junction. Although he was near the end of life and unable to communicate at the time, exploring the effect of this problem on his life would have made an interesting case study in which the unit of analysis was the individual with hypospadias.

Multiple cases are used when the researcher is interested in the same issue in different situations, or to understand a particular situation from different perspectives. To use the example of hypospadias again, a researcher might design a multiple case study to understand the decisions parents make surrounding repair of hypospadias in infants with differing severity and in different societies and religions.

Case method is a research design that is often guided by a framework and is useful to investigate a complex contemporary phenomenon using multiple data sources (Yin, 2003). Consider the possibility of studying the process of care for clients who are directly admitted to an inpatient unit for manage-
ment of kidney stones. The research question for a case study might be, “How do the nurse and patient manage the pain of kidney stones?” The unit of analysis would be pain management for kidney stones. A theoretical framework could provide guidance for data collection. Consider using the Quality Health Outcomes Model (Mitchell, Ferketich, & Jennings, 1998) to guide the research. In this model, the relationship between nursing interventions and patient outcomes is mediated by the client and the health care system. In a case study with the above research question using this model as a framework, the researcher would collect data about each area of the model. Asking the following questions, the researcher would explore the phenomenon of interest according to the model. What nursing interventions were used? How did the client and/or the health care system affect those interventions? Were the interventions effective? It would be important to collect data over time for several patients admitted with similar diagnoses. Eventually the researcher would construct the ideal case, a case study constructed using the data from several cases to describe the pain management strategies used in the particular setting of interest. The product of case research is usually a description of the object of interest. An excellent example of case research in nursing can be found in Zucker (2003).

Grounded Theory

Grounded theory grew out of the theoretical framework of symbolic interaction (Blumer, 1969; Bowers, 1988). This framework can be thought of as the lens or the glasses through which one views the world. In the case of symbolic interaction, the framework arises from sociology and proposes that individuals interpret their experience and create meaning out of those experiences (Bogdan & Biklen, 2003).

For example, suppose a nurse was talking to a group of older women about incontinence. Two of the women seemed quite distressed at the mere mention of the word incontinence. The third woman appeared embarrassed, but had several questions. The fourth woman in the group did not appear to be the least bit uncomfortable and was very willing to share her experience of effectively managing her incontinence with the others. They all agreed that incontinence was not a normal part of aging and that a woman experiencing incontinence should discuss the problem with a health care provider.

Within the group there were both individual and shared meanings in relation to incontinence. Each woman in the group responded to the topic of incontinence in a unique way. This is representative of the individual meanings each woman ascribed to the prospect of experiencing incontinence. Although each woman responded individually, they also had shared meanings about incontinence. These shared meanings provide the basis for interaction between people.

Grounded theory is a qualitative research methodology in which substantive theory is derived through an ongoing process of continually reviewing the data, refining questions, and re-evaluating these changes. The resulting substantive theory is a theory that is applicable to a specific situation. Grounded theory involves a process where “...data collection, analysis, and theory stand in close relationship to each other...One begins with an area of study and what is relevant to that area is allowed to emerge” (Strauss & Corbin, 1998, p. 12). The goal of the developed theory is to illustrate the basic social processes engaged in by the participants in a particular setting. “People sharing common circumstances...experience shared meanings and behaviors that constitute the substance of grounded theory” (Hutchinson, 1993). Strauss and Corbin (1998, p. 12) comment, “grounded theories...are likely to offer insight, enhance understanding, and provide a meaningful guide to action.” Unlike other forms of qualitative research, where the researcher may not want to develop preconceptions through extensive preparatory literature review, grounded theory methodology requires that the researcher enter the field familiar with the literature pertaining to the subject and related ideas (Glaser, 1978). The emergence of themes and a sharper focus occur over time as the participants identify their experiences to the researchers (Stern, 1994). The resulting theory “emerges as an entirely new way of understanding the observations from which it is generated. It is this understanding that permits the development of relevant interventions in the social environment under consideration” (Hutchinson, 1993, p. 182).

The researcher “tries to make the theory flexible enough to make a wide variety of changing situations understandable...[and] general enough to be applicable to the whole picture” (Glaser & Strauss, 1967, p. 242). The researcher’s goal is to inductively develop an “…inclusive, general theory through the analysis of specific social phenomenon” (Hutchinson, 1993, p. 183).

A grounded theory must be accessible and understandable to the people working in the area of the research. For example, suppose a researcher conducted a grounded theory study exploring the process engaged in by women who are not more than 50 years old to manage chronic urge incontinence. The theory should be useful to health care providers who are working with these women. The women themselves should also be able to understand the theory so that they may be better able to understand how to manage their incontinence.

A well-developed grounded theory can be used to assist the user to “understand and analyze ongoing situational realities, to produce and predict change in them, and predict and control consequences both for the object of change and for other parts of the total situation that will be affected” (Glaser & Strauss, 1967, p. 245). The theory should help the user to predict changes in the area of interest based upon the propositions of the theory. For a recent grounded theory nursing research study see Jacelon (2004).
Strategies for Data Collection

In both case and grounded theory methods, the data may come from many sources. In all qualitative research, the researcher does not profess to be an expert about the phenomena of interest. The researcher does not develop hypotheses about the phenomena; rather, he or she observes and questions and then makes sense out of those observations. Common sources for data in clinical case and grounded theory research include interviews, observation, and documents such as client records and system records on staffing, etc.

Interviews. Open-ended, qualitative interviews are conducted with all participants. In the previous example regarding pain management for clients with kidney stones, the researcher may wish to interview the client, the nurse, family members who were with the patient at the onset of pain, and nursing aides regarding identification of pain in patients on the unit, physicians, etc. Interviews are unstructured and provide a forum for exploring the phenomena that might be difficult to capture in more structured situations (Fultz & Herzog, 1996).

Participant observation. Participant observation (PO) is a data collection technique in which the members of the research team immerse themselves in the world of the participants (Bowers, 1988). While trying to become immersed in the world of the participants, the team member will simultaneously attempt to maintain a position of questioning those things that the participants take for granted (Bowers, 1988). The plan of observation is dictated by the research questions (Stake, 1995). In the example, the purpose of PO would be to observe the process of care (direct and indirect interventions) and the response to that care in relation to kidney pain. Data gathered through PO would be recorded in descriptive field notes (Bogdan & Biklen, 2003).

Documents. Documents can provide a wealth of information about the topic of study. They are most useful when used as supporting evidence for other sources of data (Yin, 2003). Sources of written data in the example of nursing intervention for kidney pain may include client records such as the medical record including operating room records, flow sheets, and operating room records, flow sheets, records of input and output, the client Kardex, etc. Documents of interest regarding system include characteristics such as staffing plans for the nursing floor upon which the study will be based, minutes of floor meetings, records of client acuity, and agency policies and procedures relevant to the focus of the study.

Strategies to Enhance Trustworthiness

Trustworthiness in qualitative research is the equivalent of validity in a quantitative study. It is established through ensuring rigor in the process of data collection and analysis. The following techniques are often used.

Bracketing is the process of the researcher becoming self-aware and reflecting on the research process and her own assumptions. For the researcher to become immersed in the experience of the participants, it is vital that she become aware of her own preconceptions, values, and beliefs, temporarily relinquishing her own perspective so as to enter the participant’s world (Bowers, 1988; Hutchinson, 1993). “It is necessary to state clearly our conscious assumptions about that which we are investigating” (Swanson-Kaufman & Schonwald, 1988, p. 99). The purpose of bracketing is to avoid the possibility that the data and the data analysis simply become a reflection of the researcher’s preconceived ideas and values (Mariano, 1995).

Prolonged engagement and persistent observation. The research design provides for prolonged engagement and persistent observation (Ely, Anzul, Friedman, & Gardner, 1991). “The purpose of persistent observation is to identify those characteristics and elements in the setting that are most relevant to the object being studied and focusing on them in detail (Lincoln & Guba, 1985, p. 304). As prolonged engagement provides scope, persistent observation provides depth to the study (Lincoln & Guba, 1985).

Multiple data sources. A major strength of case study design is the use of multiple data sources (Yin, 2003). The purpose of using multiple data sources is to maximize the range of data that might contribute to the researcher’s understanding of the case (Knafl & Breitmayer, 1991). Multiple sources of evidence will provide opportunities for comparison of data among and between participants as well as between different types of data sources (Stake, 1998).

Participant checking. Participant checking is a process of seeking feedback from the study participants. It is a method of checking the accuracy of the researcher’s interpretations of the experience of the participant. It is part of the process of establishing credibility (Ely et al., 1991). The researcher’s interpretation of the participants’ hospital stay will be discussed at the follow-up interview 3 months after discharge from the hospital.

Peer researcher support group. A peer researcher support group (Ely et al., 1991) is a valuable strategy for enhancing the quality of qualitative research. Throughout the research process, support group members review and comment on transcripts of participant observation and interviews, discuss memos written by the researcher, and provide a forum for discussing the researcher’s ideas.

The qualitative researcher’s responsibility toward trustworthiness also includes confirmability and dependability of the results. A detailed database should be maintained, and include rich descriptions so that others would be able to comprehend the researcher’s conclusions and the linkages made between the raw data and the findings (Mariano, 1995). The ability to transfer findings depends upon adequate description of the context for the research to allow others to compare their settings to that of the research. Data analysis will be discussed in a future article in this series.
Conclusions

The depth of understanding provided through qualitative research can supply an important source of knowledge to inform the care provided by urologic nurses. Case is particularly appropriate for in-depth exploration of real clinical situations. Grounded theory is an excellent tool for understanding the social processes at work as patients learn to manage new or chronic health conditions. Both methods provide insight to answer challenging and complex clinical questions. Practicing nurses are encouraged to seek out experienced qualitative researchers to mentor the rigorous process of bringing forth trustworthy, insightful findings. Guidance through the journey of selecting a design, collecting rich data, completing the appropriate depth of analysis, and preparing an interesting and informative manuscript, can provide practicing nurses with opportunities to use case or grounded theory methods to add the spark of a new dimension of challenge, insight, and illumination to their professional work.

References