CHAPTER 3

The DNP Graduate as Expert Clinician

■ Lisa Astalos Chism ■

"It seems to me shallow and arrogant for any man in these times to claim he is completely self-made, that he owes all his success to his unaided efforts. Many hands and hearts and minds generally contribute to anyone's notable achievements."

—*Walt Disney (1901–1966)*

Many Doctor of Nursing Practice (DNP) graduates will return to various advanced practice nursing or clinician roles in the clinical setting after the completion of their programs. Several years after the development of the DNP degree, one of the most frequently asked questions remains "How will the clinician's role change or benefit from earning a DNP degree"? This question is often followed by, "If I am in clinical practice, why should I earn a DNP degree"? This question may be addressed, in part, by evaluating the many aspects of clinical practice that are enhanced by the expertise garnered through a DNP degree.

The Institute of Medicine (IOM) has recommended that to meet the changing demands of health care, healthcare professionals should gain increased knowledge in evidence-based practices (EBP), information technologies, and interprofessional collaboration (Greiner & Knebel, 2003). To further meet these changing demands of health care, the American Association of Colleges of Nursing (AACN) and the National Organization of Nurse Practitioner Faculties (NONPF) have developed the curriculum standards for the DNP degree, which include guidelines for course work designed to address the evaluation, integration, translation, and implementation of evidence-based practice, healthcare information systems, and collaboration across healthcare teams and disciplines (AACN, 2006; NONPF, 2006). In addition, clinical practice may also be improved through completion of a DNP degree in more subtle ways. Mentoring and precepting future nurses and other healthcare professionals are also enhanced through the expertise garnered by earning

a DNP degree. It should be mentioned that nurses in every setting may frequently be involved in the evaluation and translation of evidence-based practice, information systems, interprofessional collaboration, and mentoring or precepting, but the DNP degree serves to augment these experiences and provide additional expertise to further develop skills in these areas. Hence, the expert clinician's knowledge base in these areas is broadened as a culmination of previous experiences in these areas and the knowledge and expertise garnered through a DNP degree.

This chapter reviews the AACN Essentials, NONPF Competencies, and National Association of Clinical Nurse Specialists (NACNS) Core Competencies that pertain to specific areas that are likely to improve the delivery of health care and healthcare outcomes in clinical practice. Advanced nursing practice and advanced practice nursing may be confusing terms, and therefore clarification is provided. The newly developed APRN Consensus Model will be reviewed as this model has implications for advanced practice registered nurses (APRNs). Evidence-based practice will be discussed with emphasis on DNP graduates' evaluation and translation of EBP in the clinical setting. Information technology is addressed in relation to how newer technologies can enhance clinical practice from a DNP graduate's perspective. Although nurses frequently collaborate with others in various healthcare settings, interprofessional collaboration, as it relates to DNP graduates' and other healthcare professionals' effect on improved healthcare outcomes in clinical practice, is addressed. Additionally, there is a greater responsibility to mentor and precept others when one earns a terminal degree in his or her field. Therefore, DNP graduates' roles as mentors in the clinical practice setting are discussed. Finally, personal accounts from DNP graduates who are practicing in the clinical setting as well as this author's journey to a DNP degree and beyond are provided.

■ Curriculum Standards Related to Clinical Practice

The AACN's Essentials of Doctoral Education for Advanced Nursing Practice include specific curriculum requirements that pertain to improving nursing practice. Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice addresses the need for increased expertise in the critical evaluation, integration, translation, and implementation of evidence-based practices. This Essential also specifies the need for advanced nursing practice professionals to evaluate practice outcomes, design and evaluate methodologies that improve quality of care, develop practice guidelines based on best practice findings, and work collaboratively with research specialists (AACN, 2006). The NONPF Competency area that addresses the requirement for this area of practice is "Scientific Foundation" (NONPF, 2006). The NACNS also addresses the need for APRNs to evaluate and translate evidence-based practice within the *Core Practice Doctorate CNS Competencies* (NACNS, 2009).

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care addresses the need for increased

expertise in information technologies that improve overall patient care. Specifically, this Essential requires that DNP graduates garner experience in data mining techniques, the design and implementation of technologies that improve quality of care, and the provision of health consumer information (AACN, 2006). The NONPF Competency area that addresses this area of expertise is "Technology and Information Literacy" (NONPF, 2006). The NACNS also addresses the need for APRNs to "evaluate and improve system-level programs based on the analysis of information from relevant sources such as databases, benchmarks, and epidemiologic data" within the *Core Practice Doctorate CNS Competencies* (NACNS, 2009).

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes pertains to developing expertise in collaboration across disciplines to improve patient care. Expertise in this area includes analyzing complex practice or organizational issues through participation and leadership of interprofessional teams, acting as a consultant to interprofessional teams, and participating in the development of practice models and policies (AACN, 2006). The NONPF Competency area "Health Delivery System" addresses collaboration and related skills to improve healthcare outcomes (NONPF, 2006). The NACNS emphasizes interprofessional collaboration and the role of APRNs within the *Core Practice Doctorate CNS Competencies* (NACNS, 2009).

Finally, Essential VIII: Advanced Nursing Practice addresses the requirements for practicing as an advanced nursing practitioner in various specialty areas. This Essential includes development of proficiency in comprehensive health assessment, implementation of therapeutic interventions, development of therapeutic relationships with patients and other healthcare professionals, and development of advanced clinical decision-making skills (AACN, 2006). The NONPF Competency area "Independent Practice" requires proficiency in these areas as well (NONPF, 2006). The NACNS includes conducting a "comprehensive assessment of client health care needs, integrating data from multiple sources which include the client and interprofessional team members" within the *Core Practice Doctorate CNS Competencies* (NACNS, 2009).

■ Advanced Nursing Practice and Advanced Practice Nursing: Let's Clear This Up

Advanced nursing practice and advanced practice nursing are terms that are often used interchangeably (Brown, 1998; Styles & Lewis, 2000); however, these terms actually have different meanings. Providing a definition of nursing will assist in the clarification of these terms. Nursing was defined by Nightingale (1859) as having "charge of the personal health of somebody and what nursing has to do is to put the patient in the best condition for nature to act upon him." In 1980, the American Nurses Association (ANA) defined nursing as "the diagnosis and treatment of human responses to actual or potential health problems" (ANA, 1995, p. 6). The ANA acknowledges that "nursing philosophy and science have been influenced by a greater

elaboration of the science of caring and its integration with the traditional knowledge base for diagnosis and treatment of human responses to health and illness" (ANA, 1995, p. 6). Therefore, contemporary nursing practice is defined as these four essential features (ANA, 1995, p. 6):

1. Attention to the full range of human experiences and responses to health and illness without restriction to a problem-focused orientation;
2. Integration of objective data with knowledge gained from an understanding of the patient's or group's subjective experience;
3. Application of scientific knowledge to the processes of diagnosis and treatment; and
4. Provision of a caring relationship that facilitates health and healing

Nursing practice describes what nurses do when they provide nursing care (Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004). To further clarify, advanced nursing practice describes what one does in various specialized roles, such as clinical practice, education, research, and leadership. The domain of advanced nursing practice is defined by the type of specialization area one pursues. Put another way, advancement has been defined in nursing as "the integration of theoretical, research-based, and practical knowledge that occurs as part of graduate nursing education" (ANA, 1995, p. 14). Davies and Hughes (1995) expanded on this to further explain that "the term advanced nursing practice extends beyond roles. It is a way of thinking and viewing the world based on clinical knowledge, rather than a composition of roles" (p. 157). Advanced nursing practice is therefore a broad term that describes what nurses do in their various advanced nursing practice roles.

Advanced practice nursing, on the other hand, describes the "whole field of a specific type of advanced nursing practice" (Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004, p. 522). Advanced practice nursing includes several specialty roles in which nurses function at an advanced level of practice (ANA, 1995; Brown, 1998). The advanced practice registered nurse "acquires specialized knowledge and skills through study and supervised practice at the master's or doctoral level in nursing" (ANA, 1995, p. 14). Advanced practice registered nurses utilize their advanced knowledge and skills within their specialty roles to provide care to individuals, families, and communities.

Hence, the Doctor of Nursing Practice (DNP) degree is the terminal degree for nursing practice, which includes roles in leadership, clinical practice, education, research, and health policy advocacy. Within the domain of advanced nursing practice are the roles defined as advanced practice registered nurses or the clinician roles. These roles include nurse anesthetist, nurse–midwife, clinical nurse specialist, and nurse practitioner. This chapter is primarily focused on the ways in which the DNP degree augments the roles of DNP graduates who are advanced practice registered nurses or in the clinician role.

■ The APRN Consensus Model

The APRN Consensus Model is a regulatory model for advanced practice registered nurses (APRN). The APRN Consensus Model was developed in 2008 to formally define advanced practice nursing regulation. This regulatory model, defines APRN licensure, accreditation, certification, and education (LACE). The electronic platform created to facilitate the implementation and ongoing communication among the regulatory entities is called the LACE network. This model also formally defines advanced practice registered nurse, describes the roles within advanced practice nursing, and defines APRN educational standards and certification standards. The model was developed by the APRN Consensus Workgroup and National Council of State Boards of Nursing APRN Advisory Committee and has been endorsed by many nursing organizations. It has been proposed that all states adopt this model by 2015. The APRN Consensus Model may be accessed at http://www.aacn.nche.edu/education-resources/APRNReport.pdf.

The APRN Consensus Model defines advanced practice roles as nurse anesthetists, nurse–midwives, clinical nurse specialists, and nurse practitioners (Consensus Model, 2008). These roles are related to specific population foci defined as family (across the lifespan), adult/gerontology, neonatal, pediatrics, women's health, and psychiatric/mental health (Consensus Model, 2008). Specialty roles are also addressed within the model and defined as "focus of practice beyond roles and population focus linked to health care needs" (Consensus Model, 2008, p. 10). Examples of specialty roles include (but are not limited to) oncology, palliative care, orthopedics, and nephrology.

The APRN Consensus Model clearly defines APRN education, certification, and licensure requirements as well. Details can be found within the report. Importantly, the implications for DNP graduates are primarily related to the educational requirement of all APRNs. Broad-based APRN education is defined as formal education with a graduate degree (master's or doctorate) or postgraduate certificate awarded by an academic institution and accredited by a nursing or nursing-related accrediting organization (Consensus Model, 2008). The educational requirements for APRNs include preparing the graduate to practice within one of the four delineated APRN roles. Therefore the APRN Consensus Model will influence the development of DNP degree curricula, particularly the post-BSN DNP curricula for the four APRN roles.

■ Evidence-Based Practice

Evidence-based practice (EBP) "[denotes] disciplines of health care that proceed empirically with regard to the patient and reject more traditional protocols" (Evidence-based, n.d.) Evidence-based practice in nursing has been defined as "integration of the evidence available, nursing expertise, and the values and preferences of the individuals, families, and communities who are served" (Sigma Theta Tau International,

2004, p. 69). Congruent with the aims of the DNP degree, Gibbs (2003) related that evidence-based practitioners adopt a process of lifelong learning that involves continually asking clients questions of practical importance, searching for the current best evidence relative to each question, and taking the appropriate action that is guided by the evidence. The overall goal of evidence-based practice is therefore to promote optimal healthcare outcomes, which are based on critically reviewed clinical evidence, for individual patients, families, and communities.

Although all DNP graduates are expected to evaluate, integrate, and implement evidence-based practices into their particular setting, DNP graduates in the clinician role have a vantage point of evidence-based practice due to their direct impact on care in the clinical setting. Practicing in the clinical setting provides an environment for the DNP graduate clinician to develop and utilize skills pertaining to evaluating, integrating, and implementing evidence-based practice. Further, who better to formulate relevant research questions about practice than the clinicians who provide the care? Jennings and Rogers (1988) recognized that, "While certain aspects of the research process can be shared, it is those nurses in the clinical realm who have the sole opportunity to use research to guide practice" (p. 754).

Barriers to Evidence-Based Practice

It is evident throughout the literature that when evidence-based practices are used to deliver care, the best patient outcomes are achieved (Melnyk, Fineout-Overholt, Feinstein, Sadler, & Green-Hernandez, 2008; Melnyk & Fineout-Overholt, 2005). Despite this, EBP is often met with resistance in the clinical setting. Pravikoff et al. (2005) found that when 1,097 nurses were surveyed, approximately half were not familiar with the term "EBP," and most did not know how to search information databases for literature. This may also be due to the fact that nurses were noted to lack the computer and library training necessary to adequately search the literature for scientific validation (Fink, Thompson, & Bonnes, 2005; Melnyk, 2005; Pravikoff, et al., 2005).

Nurses have also been noted to resist new practice patterns despite evidence that EBP improves patient care outcomes. Nurses regularly practice a certain way because of tradition, past experiences, and intuition rather than utilizing scientific validation (Egerod & Hansen, 2005; Pravikoff, et al., 2005). This may be a function of the lack of knowledge about EBP (Melnyk, et al., 2004) as well as lack of belief regarding the influence of EBP on positive outcomes (Melnyk & Fineout-Overholt, 2005). Please refer to **Table 3-1** for a summary of barriers to EBP. DNP graduates have the opportunity to change these barriers and provide the education to other healthcare professionals regarding the positive outcomes achieved when EBP patterns are employed. Further, DNP graduates may also improve the perceptions about EBP by role modeling and adopting EBP patterns themselves. Mentoring others regarding EBP includes role modeling as well as actively engaging healthcare professionals in activities that promote the use of EBP.

Table 3-1 Barriers to Evidence-Based Practice Summarized

- Lack of computer training
- Lack of library resources and library training
- Resistance to change due to reliance on tradition, past experience, and intuition
- Lack of knowledge about the positive influence of EBP on outcomes
- Lack of belief that EBP will positively influence outcomes
- Poor motivation to investigate EBPs

Reducing Barriers to Evidence-Based Practice

Although employing EBP methods in their own clinical practice is paramount, DNP graduates in clinician roles also have a responsibility to reduce the EBP barriers within their practice settings. Further, DNP graduates' expertise in information systems technology, leadership, clinical decision making, and EBP evaluation, integration, and implementation places them in the perfect position to reduce EBP barriers in the clinical setting. Therefore, the challenge for DNP graduates in the clinician role lies not only in overcoming their own barriers regarding the adoption of EBP patterns but also in providing the leadership and role modeling necessary to promote EBP in the clinical setting.

What interventions will enable DNP graduates to foster the use of EBP in their own practice settings and overcome the barriers to EBP? Research has shown that defining EBP for all who provide care is essential (Hudson, Duke, Haas, & Varnell, 2008). In addition to providing a clear definition of EBP, DNP graduates must provide the knowledge and skills necessary to critically evaluate EBP. Hudson, Duke, Haas, and Varnell (2008) state, "Nurses must have the knowledge and skills to critically question and assist with correcting misguided, inaccurate, or insufficient guidelines in practice" (p. 414). Others in the literature have also agreed that barriers to EBP can be overcome with additional education that strengthens knowledge regarding methods to critically evaluate and integrate EBP (Melnyk, et al., 2004; Melnyk & Fineout-Overholt, 2005; Sheriff, Wallis, & Chaboyer, 2007). Specifically, learning how to navigate information system databases is a valuable tool to locate and evaluate pertinent EBP information (Melnyk, et al., 2004). DNP graduates gain proficiency in information technologies in their graduate programs and are therefore ideal consultants in this area. Research also suggests that interactive workshops were shown to be effective pedagogical techniques to increase knowledge and understanding of EBP (Sheriff, Wallis, & Chaboyer, 2007). DNP graduates' leadership and collaboration skills facilitate the development and provision of inservice programs and workshops regarding EBP in the clinical setting.

The literature also suggests that it is not enough to have knowledge about EBP; one must believe that EBP actually has a positive effect on outcomes (Melnyk, 2002; Melnyk & Fineout-Overholt, 2005). Hence, DNP graduates in the clinician role may

convince others through specific exemplars that adopting EBP patterns is worth the effort. Increasing belief in EBP may also be achieved through mentoring and role modeling the use of EBP. In a study by Melnyk et al. (2004), nurses reported increased use of EBP was directly influenced by "support from faculty, clinical nurse specialists, nurse practitioners, library resources and personnel, administrators, research departments, peer researchers, and specific mentors or clinical experts, as well as time for discussion and use of current research" (p. 191). DNP graduates are often viewed as mentors and role models and therefore are in an ideal position to influence others regarding the use of EBP. **Table 3-2** provides tips for DNPs to reduce barriers to evidence-based practice.

DNP Graduates Evaluating and Translating Evidence-Based Practice

DNP graduates in clinician roles are perfectly positioned to ask questions directly from the clinical setting. Asking questions is the first and most important step toward integrating EBP into clinical practice. Further, asking clinically relevant questions is essential to the development of new knowledge in a field. After the question has been asked, answers may be evaluated in the clinical setting, which allows for direct implementation of EBP. It has been suggested in various dialogues about EBP that it may take up to 18 years to adopt practices based on clinical evidence. Reducing this amount of time to evaluate and translate EBP is essential and well within the domain of DNP graduates. Further, activities such as evaluating research articles in journal clubs, developing inservice programs and workshops that teach evaluation and implementation of research findings, and conducting and reviewing literature searches of the most current evidence will further encourage the adoption of EBP in the clinical setting and foster the improvement of healthcare outcomes. **Table 3-3** provides tips for DNP graduates to evaluate and translate evidence-based practice within their own practices.

Case Scenario of a DNP Graduate Clinician's Experience with Evidence-Based Practice

Dr. C. is a DNP graduate clinician (certified nurse practitioner) working in a hospital-based, internal medicine ambulatory care setting. Dr. C. was a graduate student in a

Table 3-2 Tips for DNPs to Reduce Barriers to Evidence-Based Practice

- Define evidence-based practice to others in the healthcare setting.
- Provide education regarding evidence-based practice that emphasizes positive outcomes through inservice training and workshops.
- Provide consultation regarding information systems, including searching databases for pertinent answers to clinically formulated questions.
- Increase belief in the benefits of EBP by mentoring others in the healthcare setting and providing exemplars through case studies.
- Mentor others in EBP methods, such as searching databases and critically reviewing and evaluating research findings.

Table 3-3 Tips for DNP Graduate Clinicians to Employ Evidence-Based Practices Within Their Own Practices

- Formulate questions when providing care, especially when you don't know if the treatments/recommendations are based on clinical evidence.
- Review/conduct literature reviews regarding treatments or topics you are interested in or question the best practices.
- Start a journal club in your area of clinical practice and meet regularly to discuss pertinent literature.
- If you are in an organization with a library or related resources, ask your reference librarian to conduct searches or automatically alert you regarding pertinent topics you encounter in practice.
- Communicate with other healthcare professionals and ask questions about whether certain practices are based on evidence or simply what has always been done.
- Organize inservice programs for staff and others about how to search for the evidence and find the best answers to questions.

DNP program when she accepted this position. While in school, Dr. C. inquired about resources within the institution that might help her apply the latest research findings to patient care. Dr. C. received assistance from the reference librarian at this institution and began obtaining literature regarding pertinent patient issues.

Initially, sifting through this information was difficult. The myriad results, discussions, and literature reviews made it difficult to decipher what information was accurate and pertinent to best practice recommendations. Through her graduate program, Dr. C. attended a methodology workshop (part of the DNP curriculum) that clarified how to critically review a research article and determine whether the information was indeed valuable. Upon finishing her DNP program, Dr. C. became more proficient at locating and evaluating EBP information. Now, when Dr. C. reviews evidence-based practice articles, she critically evaluates the information for sample sizes, accuracy of statistical analyses, and ability to generalize the results to the given population. As a clinician, Dr. C. is able to apply the EBP patterns she researches and validate effectiveness in her setting.

Taking this knowledge and added expertise a step further, Dr. C. suggested to the physician she practices with that they start a journal club in their setting. Dr. M. was enthusiastic about this and offered to assist with presentation of pertinent topics, even contributing his "Journal Watch" articles for review. Dr. C. also regularly precepts students from various advanced practice nursing programs and now integrates the review of EBP techniques as part of her students' clinical experiences. Dr. C. has found that as she becomes more proficient at reviewing the information, the less time it actually takes her to incorporate EBP activities into her day.

■ Information Technology

Following a discussion about EBP, the literature is clear that proficiency in information technology is essential to foster the use of EBP (Carroll, Bradford, Foster, Cato, &

Jones, 2007; Peck, 2005; Zytkowski, 2003). Others refer to the "knowledge explosion" taking place in health care and state that "there has been increasing pressure for health care systems to improve efficiency while standardizing and streamlining organizational processes and maintaining care quality" (Carroll, et al., 2007, p. 39). The amount of information now being accessed to improve quality and healthcare outcomes requires that nurses embrace nursing informatics in every healthcare setting. Curran (2003) relates that "health and knowledge are increasing at a rapid rate. Both the ability to manage information and skilled use of technology are basic tools for practice" (p. 320).

Information technology is also referred to in the nursing literature as nursing informatics. Nursing informatics is defined as "a combination of computer science, information science, and nursing science designed to assist in the management and processing of nursing data, information, and knowledge to support the practice of nursing and the delivery of nursing care" (Graves & Corcoran, 1989, p. 227). The International Medical Informatics Association's Special Interest Group on Nursing Informatics (IMIA-NI) offers a similar definition that includes the "integration of nursing, its information, and information management with information processing and communication technology, to support the health of people worldwide" (IMIA-NI, 1998). From these definitions, it may be extrapolated that the purpose of nursing informatics is to develop systems that manage, organize, and process health information (Zytkowski, 2003) in an effort to improve quality of care and healthcare outcomes. Nursing informatics has become so essential to improving quality and healthcare outcomes that in 1992 the American Nurses Association (ANA) designated nursing informatics as an approved nursing specialty (Zytkowski, 2003). The ANA (2001) refers to nursing informatics as "a specialty that integrates nursing science, computer science, and information science to manage community data, information, and knowledge in nursing practice" (p. vii). For the purpose of this discussion, the broader term "information technology," which includes nursing informatics, is used.

Is Nursing Overcoming Technophobia? Embracing Information Technology

Traditionally, nursing has been somewhat reluctant to embrace information technology (Gaumer, Koeniger-Donohue, Friel, & Sudbay, 2007; Peck, 2005; Simpson, 2004). However, due to the need for improvement in quality and healthcare outcomes, nursing has begun the challenge of integrating information technologies into patient care. Further, the Institute of Medicine's call for improvement in quality and healthcare outcomes specifically designates proficiency in information systems as a requirement for healthcare professionals (IOM, 2001). The IOM's report *To Err Is Human* (Kohn, Corrigan, & Donaldson, 2000) was the initial call for a decrease in medical errors. *Crossing the Quality Chasm* (IOM, 2001) followed this report and specifically called for an emphasis on information technology to improve healthcare outcomes and reduce errors. In 2003, the IOM published a report outlining the requirements for healthcare professionals' education and recommended that information technologies

be included as a core competency for all healthcare professionals (Greiner & Knebel, 2003). These reports, as well as nursing's desire to improve patient care outcomes, has contributed to nursing's increasing acceptance of information technology.

Consequently, recent research has shown that nursing noted improved care through the adoption of information technology. A study by Gaumer, Koeniger-Donohue, Friel, and Sudbay (2007) described the use of information technologies by advanced practice registered nurses (APRN). Seventy percent of the APRNs surveyed reported that they were able to perform their job better due to information technologies. Nearly all (87%) of the APRNs stated that their time was more efficiently spent because of information technology. Further, 81% perceived that patient safety was improved through information technologies. Overall, 75% responded that their caregiving was improved by the use of information technologies.

Simpson (2004) also stated that information technology improves nursing practice by "counteracting human error, by improving human behavior, and by putting nurses where they need to be to be more effective" (p. 303). Further, information technology has the potential to improve more specific aspects of nursing. Recruitment and retention are improved due to improvement of job satisfaction through information technologies, such as electronic charting, electronic mobile devices, and innovative devices such as smart intravenous pumps (Simpson, 2005). Patient care is improved by information technologies that facilitate the "data-to-information-to-knowledge continuum" (Simpson, 2005, p. 346). Evidence-based practices are more accessible via information technologies and are therefore more quickly adopted by nursing. Overall, the use of information technology to evaluate and implement EBP improves quality and patient care outcomes.

Specific to advanced nursing practice, Zytkowski (2003) relates that information technology has an impact on nurse practitioners' practices by influencing "access to individual health information, reimbursement, and practice based on evidence from research" (p. 278). Further, nurse practitioners are responsible for improving patient care while adhering to organizational standards for scope of practice. These demands are dependent on access to real-time resources and information (Zytkowski, 2003). Information technology provides this information in the most up-to-date fashion through Internet resources.

More Than Just Nuts and Bolts: Technology Used to Improve Clinical Practice

Information technology is used by nurses in many specialty areas related to nursing practice, such as leadership roles (computer software for management of health information), education roles (distance education technologies), and clinician roles (personal digital assistants or PDAs). The employment of information technology in nursing practice is becoming commonplace. Further, many nurses, especially in the clinical environment, are using various information technologies and do not realize they are doing so.

Nursing leaders may be found using information technology to perform data mining. This technique enables the sorting of data from large populations to reveal healthcare-related patterns that may improve the quality of care and healthcare outcomes. Nursing leaders may also use software that organizes large amounts of systems information to streamline the management of systems issues. Information technology may also be used by nurse leaders to communicate information to large groups of people who are not in the same location through Internet technology.

Nursing educators may also be found using information technologies to share information with students. Online course work, e-mail, and interactive live meetings are now integral aspects of distance education. These technologies allow the sharing of information to those previously not able to attend courses on campus.

Nurses in the clinical setting are inundated with data related to patient care and frequently use very innovative types of information technologies. Personal digital assistants are often found in the pocket of many nurses in the clinical setting. They may be loaded with software such as Epocrates, 5-Minute Clinical Consult (5MCC), and various other programs that are available on the Internet and are designed to provide information in the palm of one's hand. Some of these programs are free and may be downloaded immediately. Clinical pharmacists endorse the use of PDAs by nurses in the clinical setting and find that PDAs provide general management and data collection, drug referencing for side effects, adverse reactions, compatibility, dose-specific reactions, and clinical references relating to diagnoses, disease management, and laboratory referencing (Shneyder, 2002). Software programs such as Epocrates offer pharmacology, diagnostic, and symptom information. Epocrates also offers a medical dictionary and an International Classification of Diseases/Current Procedural Terminology (ICD/CPT) billing code feature to allow for accurate terminology and billing for diagnoses and procedures.

Another example of nurses in the clinical setting employing nursing informatics is the use of "telehealth" technologies. Telehealth is defined as "the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, public health, and health administration" (Sharp, 1998, pp. 68–69). Nursing tends to prefer telehealth because of the emphasis on patients' long-term wellness, self-management, and health (Peck, 2005). Telehealth can be used as an interactive technique or as a method to track patient data. As access to patient care data improves, patient care improves as well (Peck, 2005). Telehealth also includes care that is provided despite distance. Collaboration between physicians and advanced practice registered nurses (APRNs) frequently takes place from one location to another. Nursing home care companies are also employing telehealth by providing nurses in the field with PDAs that can take photos of wounds, upload the photos to a web-based site, and allow an APRN to view the photos through an online portal. The patient's status is evaluated and care is provided without the APRN leaving his or her clinical setting.

Advanced practice registered nurses may also integrate information technology into patient education. Internet resources can provide patient information quickly and easily. However, patients are often intimidated by the Internet and are not sure how to accurately search for information. Advanced practice registered nurses can access this information for patients quickly and print patient education resources that are frequently available on various health-related websites. Further, APRNs can decipher accurate information for patients while advising them what information is accurate and appropriate for patient education. Knowing what information is appropriate and deciphering this information for patients is a form of information technology (Curran, 2003).

DNP Graduates Navigating the Information Highway

As information technology specialists, how do DNP graduates in clinician roles utilize nursing informatics to improve quality and healthcare outcomes? Many of the answers are reviewed in this chapter. It should also be mentioned that nurses in all clinical settings frequently engage in the use of information technology. However, of the information technologies reviewed, some are essential proficiencies for DNP graduates who are most directly involved in patient care.

The use of PDAs is vital for the provision of up-to-date, efficient, and accurate information to DNP graduates in the clinician role. The use of this technology improves access to information regarding medications, treatment regimens, and billing and coding information. This information improves quality of care, safety, and cost.

Techniques to provide patient information accessed on the Internet are also essential for DNP graduates in the clinician role. Advising patients on accurate health-related websites is a skill that is appreciated by patients who do not feel comfortable looking for this information themselves. Simply utilizing a search engine to print information for patients, in their language, is a nursing informatics skill that is often overlooked as information technology. However, this skill improves patient education, and therefore quality and patient care outcomes are improved.

The use of telehealth is also a valuable tool to improve nursing practice by allowing care to be more accessible. APRNs can utilize Internet portals to view patient data and modify care as the data change to allow for seamless, efficient, and improved care. Telehealth as a means to share information is also essential for DNP graduates in clinician roles. Physician–DNP graduate collaboration may be improved through telehealth technologies by providing consultation in rural areas.

Partnering with nursing administration to perform data mining techniques also allows DNP graduates in clinician roles to observe patterns in large amounts of patient data. This information provides insights about patient patterns regarding their health status and facilitates solutions to improve patient care. Data mining also facilitates the development of evidence-based practice patterns.

Finally, exhibiting an overall comfort with the utilization of information technology will enable DNP graduates in clinician roles to influence others' comfort

with technology. Teaching others how to access information on the Internet, sharing information obtained on PDAs, and participation in the development of inservice training regarding nursing informatics will encourage others to become involved in learning about and using these technologies. It is widely known that participation in the design, development, and use of information technology will increase the likelihood that it is accepted (Carroll, et al., 2007; Courtney, Demiris, & Alexander, 2005).

Please refer to **Tables 3-4** and **3-5** for lists of ways that DNP graduates can use information technology and websites regarding information technology.

Case Scenario of a DNP Graduate Clinician's Experiences with Information Technology

As one can see, information technology can be integrated into the clinical setting in various ways to improve quality and patient outcomes. Dr. A. is a DNP graduate nurse practitioner who works in an off-site hospital outpatient setting. Dr. A. utilizes various information technologies throughout his day while seeing patients.

Dr. A. frequently utilizes his hospital reference librarian to obtain new information technologies that are available within his system as well as in any healthcare setting.

Additionally, when caring for patients, Dr. A. frequently uses a search engine to obtain patient information while patients are in the clinic. Dr. A. believes that this empowers patients and provides much-needed information at a time when patients are vulnerable.

Dr. A. also uses a PDA loaded with Epocrates software. He uses Epocrates regularly to check for medication interaction and obtain information about specific diagnoses. In addition, Dr. A. recently upgraded his Epocrates software and is able to obtain ICD/CPT codes to ensure accurate billing.

Recently, Dr. A. became aware of a local home care company that equips its nurses with PDAs to document patient care while at the bedside. These home care nurses also have the capability to photograph wounds, download the photos on the

Table 3-4 Utilization of Information Technology for DNP Graduates in Clinician Roles

- Use PDAs to access up-to-date information regarding medications, diagnostics, and symptoms.
- Use Internet search engines to access patient information materials.
- Review websites for patients to determine if the most accurate and appropriate information is being relayed.
- Utilize reference librarians at your institution or locally to obtain information technology resources and assist with literature searches.
- Partner with administration to become involved in data mining to evaluate patterns in patient data.
- Provide inservice training to other healthcare professionals regarding information technology.
- Role model and utilize information technologies in your clinical setting and share what technologies improve your clinical practice.

Table 3-5 Websites for Information Technology in Nursing

www.himss.org/ASP/topics_nursinginformatics.asp
This website provides information from the Healthcare Information and Management Systems Society Nursing Informatics Task Force.

www.cinjournal.com
This is the website for the *Computers, Informatics, Nursing* journal.

www.ojni.org
This is the website for the *Online Journal of Nursing Informatics*.

www.informaticsnurse.com
This website lists informatics nursing jobs and miscellaneous nursing informatics information.

www.nursinginformatics.com
This website provides information regarding education and continuing education courses about nursing informatics.

www.ania.org
This is the website for the American Nursing Informatics Association.

home care secure site, and provide a portal for healthcare professionals to view these photos from the clinical setting. Interestingly, Dr. K., the physician who works with Dr. A., was not interested in sampling this website with the home care agency until Dr. A. convinced him to view the wound photos on the site. Both Dr. A. and Dr. K. now regularly consult this home care company and are able to update the plan of care while still in their clinical setting.

Because of the expertise in information technology Dr. A. garnered while in a DNP program, he is comfortable discovering and utilizing new information technologies within his clinical setting. Prior to his DNP program, Dr. A. shared some of the same reluctance many others express with regard to information technologies. However, Dr. A.'s awareness of the IOM's call for improved health care through the utilization of information technologies and the importance of obtaining up-to-date information that is available through information technologies confirmed for him that it is necessary to become comfortable with these technologies.

■ Interprofessional Collaboration in the Clinical Setting: More Than Just Getting Along

Interprofessional collaboration was discussed previously as it relates to DNP graduates in leadership or potential leadership roles. The current discussion regarding interprofessional collaboration relates specifically to DNP graduates in clinician roles. The recognition that one caregiver alone is unable to support the complexity of current healthcare delivery led to the IOM's recommendation that interprofessional collaboration be included in the educational standards of healthcare professionals in the future (Greiner & Knebel, 2003). Given the additional preparation in this area garnered through a DNP program, the DNP graduate in a clinician role is in a perfect position to influence and exemplify interprofessional collaboration.

Interprofessional collaboration from the clinician's perspective involves more than just getting along with your collaborating physician. The word "collaborate" is derived from the Latin word "collaborare," which means "to work with one another" (Webster, 2004). The American Nurses Association (ANA, 1995) has defined collaboration as a partnership with shared power, recognition and acceptance of separate and combined practice spheres of activity and responsibility, mutual safeguarding of the legitimate interests of each party, and a commonality of goals.

Interprofessional collaboration has repeatedly been shown to decrease healthcare costs and improve both quality of care and healthcare outcomes. Cowan et al. (2006) found that collaborative relationships between physicians and nurse practitioners reduced hospital length of stay without altering readmissions or mortality. McKay and Crippen (2008) also found that instituting a collaborative practice model decreased length of hospital stay and overall healthcare costs. Schmalenberg et al. (2005) also noted that interdisciplinary collaborative relationships between nurses and physicians were linked to improved quality of care. Finally, Knaus, Draper, Wagner, and Zimmerman (1986) reported that when collaborative relationships were present in hospitals, 41% lower mortality occurred than the predicted number of deaths.

Although evidence clearly supports interprofessional collaboration, others have reported barriers. Stein-Parbury and Liaschenko (2007) reported that interprofessional collaboration was hindered when physicians dismissed nurses' knowledge, clinical assessment skills, and concerns about patients. Another frequently noted barrier was lack of recognition regarding other healthcare professionals' roles or knowledge base (Yeager, 2005). The overwhelming solution presented in the literature regarding these barriers was improved communication between healthcare professionals (Gerardi & Fontaine, 2007; McKay & Crippen, 2008; Rossen, Bartlett, & Herrick, 2008; Stein-Parbury & Liaschenko, 2007). Other antecedents to interprofessional collaboration included shared vision between healthcare professionals (Hallas, Butz, & Gitterman, 2004; Yeager, 2005) and trust and respect regarding fellow healthcare professionals' knowledge and expertise (Stein-Parbury & Liaschenko, 2007).

Creating the Bridge: The Challenge for DNP Graduate Clinicians

What does this all mean to the DNP graduate clinician? Although fostering collaboration was discussed in the previous chapter in relation to leadership, one may begin to see how the roles of DNP graduates are truly integrated. The DNP graduate in a clinician role may not be in a formal leadership position; however, the same set of skills is required to promote interdisciplinary collaboration in the clinical setting. These skills will enable DNP graduates in a clinician role to create a bridge between all members of the healthcare team.

Gerardi and Fontaine (2007) described collaboration in relation to the American Association of Critical-Care Nurses' (AACN) *Standards for Establishing and Sustaining Healthy Work Environments* (AACN, 2005). Six key components were found to be essential for a healthy work environment and "true collaboration" was included.

Gerardi and Fontaine state that "true collaboration is a way of being and a way of working" (2007, p. 10). These are words for DNP graduates to live by. Gerardi and Fontaine also related that true collaboration is a "continuum of engagement" that involves "self-reflection, information sharing, negotiation, feedback, conflict, engagement, conflict resolution, and finally forgiveness and reconciliation" (2007, p. 10).

DNP graduates in clinician roles engage in balancing acts daily when collaborating with other healthcare professionals. Communication techniques that include open listening, understanding multiple perspectives, and developing patient-oriented solutions negotiated together within a team have been noted repeatedly to foster interdisciplinary collaboration (Goleman, Boyatzis, & McKee, 2002; Hamric, Spross, & Hanson, 2005).

Apker, Propp, Zabava Ford, and Hofmeister (2006) explored how nurses communicate professionalism while collaborating with other healthcare team members. These authors noted that displaying professionalism can lead to beneficial outcomes for patients, nurses, and organizations (Apker, Propp, Zabava Ford, & Hofmeister, 2006). Moreover, this study found that four specific types of communication fostered collaboration as well as enabled nurses to display professionalism. These were named the "Four C's of Professional Nurse Communication in Health Care Team Interactions" and included collaboration, credibility, compassion, and coordination (Apker, Propp, Zabava Ford, & Hofmeister, 2006, p. 183).

Collaboration was further elaborated on as updating team members regularly and preparing appropriately before presenting the information. Nurses who "had their ducks in a row" when collaborating were viewed as being professional as well. Further, nurses who engaged in dialogue with physicians to identify solutions for problems and shared in the decision making also displayed professionalism as well as effective collaboration.

Credibility was further described as how nurses display their proficiency while collaborating with other healthcare team members. Establishing credibility when collaborating may also reduce barriers to collaboration associated with lack of recognition of team members' knowledge and expertise. Interestingly, nurses who effectively displayed credibility while adjusting their communication style depending on the varied roles, personalities, and situations were viewed as effectively collaborating with other healthcare team members. Terms such as "sensing the environment" and "adapting to the situation" were used to describe nurses who displayed credibility while collaborating (Apker, Propp, Zabava Ford, & Hofmeister, 2006, p. 184). These terms are similar to the emotional intelligence competencies that were noted to improve communication and leadership in the previous chapter.

Compassion was described as showing consideration for all team members, especially those who were considered to be novices (Apker, Propp, Zabava Ford, & Hofmeister, 2006). Mentoring and demonstrating social support to newer team members were considered key to displaying professionalism and compassion. Advocacy was another behavior noted to be associated with compassion. Respondents stated that

when other team members were advocated for, compassion was displayed. Finally, communication that included an optimistic, supportive, and positive attitude was noted to display compassion (Apker, Propp, Zabava Ford, & Hofmeister, 2006).

The final communication skill set included coordination. The manner in which nurses coordinate healthcare delivery speaks to nurses being in the center of the "hub" of the healthcare team (Apker, Propp, Zabava Ford, & Hofmeister, 2006, p. 185). This communication skill demonstrates the leadership nurses must assume every day when providing care. The ability to coordinate care while collaborating with the healthcare team demonstrates nursing professionalism as well.

With regard to DNP graduates, Apker, Propp, Zabava Ford, and Hofmeister's (2006) work describes valuable insights for collaboration and professionalism in nursing. DNP graduates have earned the terminal degree in their field. Therefore, demonstrating professionalism through effective collaboration is vital to their success in every role they may assume.

Realizing that "true collaboration is a way of being" (Gerardi & Fontaine, 2007, p. 10) will also enable DNP graduates to successfully build a bridge between all healthcare disciplines. Knowing how to effectively communicate while collaborating between healthcare disciplines will enable DNP graduates to effectively collaborate and build a bridge between healthcare disciplines. Building a bridge between all healthcare disciplines will facilitate interprofessional collaboration and enable DNP graduates to continually improve quality and healthcare outcomes in an ever-changing, complex healthcare environment. Please refer to **Table 3-6** for bridge-building tips.

Case Scenarios of Interprofessional Collaboration

The following case scenarios describe two types of interprofessional collaboration; one in which the DNP graduate is unsuccessful in building a collaborative relationship and one in which the DNP graduate experiences interprofessional collaboration.

Table 3-6 Tips for Building a Bridge Between Healthcare Disciplines

- Respect the knowledge and expertise of other members of the healthcare team in the clinical setting.
- Frequently seek out input and feedback from other members of the healthcare team, especially members in other disciplines.
- Provide accurate and complete information when discussing patients or patient care issues with members of the healthcare team.
- Organize team meetings with members of the healthcare team to focus on new treatment guidelines and evidence-based practices.
- Communicate effectively by utilizing active listening, compassion, and empathy.
- Use emotional intelligence competencies to accurately assess the needs of the healthcare team and feel the room's emotional environment.
- Mentor new team members and provide social support through compassion and empathy.

Case Scenario 1: An Attempt to Build a Bridge

Dr. L. is a new graduate from a BSN-to-DNP program. His experience with collaboration involves working with physicians in a small, rural emergency room setting. His specialization in his DNP program prepared him to become certified as an acute care clinical nurse specialist. Upon graduating, Dr. L. took a position as an emergency room nurse practitioner and began working with the same healthcare team he previously worked with.

Early on, Dr. L. attempted to develop a grand rounds program in the emergency room that would include case presentations with input from all disciplines in the ER setting, including pharmacy, nursing, and medicine. Unfortunately, this idea was met with much resistance from the ER staff physicians. Additionally, when attempting to collaborate with the physicians regarding patient care, Dr. L. was treated poorly and frequently questioned in an accusatory fashion when he suggested different evidence-based treatments. Dr. L. overheard staff physicians making statements such as, Who does he think he is recommending this treatment? The medical staff treated him disrespectfully in front of other staff members and patients. As a result, the nursing staff did not exhibit any trust in his abilities.

Dr. L. approached the nurse manager of the ER and was again met with resistance regarding additional educational programs for the staff. Instead of the physicians and nurse manager providing mentoring, Dr. L. was left to fend for himself. Hospital administration offered no assistance and did not have previous experience dealing with the issues related to advanced nursing practice. Eventually, Dr. L. left the hospital he worked at and relocated to work in a large university setting with other advanced practice registered nurses. Dr. L. felt he would get the support and mentoring he needed to grow as an advanced practice registered nurse and a valued member of the healthcare team. Sadly, the small, rural hospital lost a DNP graduate who attempted to improve quality of care and patient outcomes through collaboration.

Case Scenario 2: A Bridge Built

Dr. N. is a DNP graduate working as a nurse–midwife in a university-affiliated outpatient clinic. Dr. N. began to notice that she has been caring for an increasing number of patients who had previously undergone bariatric surgery and are now pregnant. Upon doing a literature search to obtain information regarding caring for this unique population, Dr. N. noted that there was a paucity of evidence-based practice guidelines available pertaining to pregnant postbariatric surgery patients.

Dr. N. took the first step to integrating evidence-based practice and asked a question. What are the increased risks to both mother and baby when the mother has had bariatric surgery? Dr. N. requested a grand rounds meeting with the departments of obstetrics, surgery, and dietary. She contacted her reference librarian, who provided her with literature regarding bariatric surgery and postsurgical complications, including risks that persist well after surgery. Dr. N. also contacted the information

technology department, and with their assistance she was able to arrange a satellite meeting with another teaching institution that had recently begun a clinical trial involving pregnant patients who had previously undergone bariatric surgery.

The grand rounds meeting was well attended by nursing, medicine, obstetrics, surgery, and dietary. Many questions were raised regarding how to care for this population, including how to address their unique nutritional needs. The team initiated steps to develop a research program in their institution, and Dr. N. was able to actively participate in this endeavor. Dr. N. used the knowledge she had garnered in her DNP program to integrate evidence-based practice, utilize information technologies, and build a bridge between disciplines. This process had started with her simply asking a question while caring for her patient.

■ Mentoring: DNP Graduates Shaping the Future of Clinician Roles

"Mentor" has been defined as a trusted counselor or guide (McKinley, 2004; Webster, 2004). The term "mentor" originated in Greek mythology and refers to Odysseus's trusted counselor, who became his son Telemachus's teacher (Webster, 2004). Odysseus entrusted the care of his son to Mentor while he went to fight in the Trojan War. Mentor's job was not just to teach Telemachus but to help him develop as a man and prepare him for the responsibilities he would assume (McKinley, 2004). In the professional realm, mentoring involves helping others achieve goals as well as offering support in a nonthreatening way. Hence, the clinical setting is an ideal place for DNP graduates to mentor and shape the future of nursing.

DNP Graduates: From Experts to Novices and Back to Experts

Mentoring involves the mentor having a certain level of expertise. A discussion about expertise and mentoring would not be complete without mentioning Patricia Benner's (1984) work *From Novice to Expert*. Dr. Benner's work is derived from The Dreyfus Model of Skill Acquisition. This model posits that while developing a set of skills, one progresses through five levels of proficiency: novice, advanced beginner, competent, proficient, and expert (Benner, 1982; Dreyfus & Dreyfus, 1980). Dr. Benner has purported that these levels of skill development may be used to describe how nurses develop proficiency as experts. Dr. Benner's premise was that experience results in expertise. Nurses begin their careers as novices and move through the levels by gaining experience in the clinical setting. Expertise has been characterized as knowing the vision of what is possible (Benner, 1982). In other words, knowing the goals and possible outcomes from an expert's interventions is what allows a nurse to move from proficiency to expertise.

By definition, DNP graduates are in a position of expertise. DNP graduates are acutely aware of the goals of healthcare delivery as well as various interventions to improve these goals. However, many of the new skills introduced (or reinforced) to

DNP graduates place them in the position of novice after spending perhaps years in the position of expert. Concepts such as evidence-based practice, information technologies, leadership skills, interprofessional collaboration, and research methodology may be less familiar to many DNP graduates who may be functioning at high levels of expertise in the clinical setting. Therefore, garnering newer, sophisticated skills in a DNP program may make many DNP graduates feel less like experts and more like novices.

Despite this, many DNP graduates will find themselves in the role of mentor. However, the wealth of clinical expertise many DNP graduates possess may allow them to move from novice to expert quite easily. The new skills DNP graduates garner in their programs are integrated into their nursing practice. Further, the skills acquired in a DNP program enable graduates to develop an enlarged view of healthcare delivery and design ways to improve healthcare outcomes, which will foster expertise in nursing practice. Dracup and Bryan-Brown (2004) relate that "the expert has gone beyond the tasks and responds to the whole picture" (p. 449). DNP graduates are well beyond the tasks of nursing and are able to envision the whole picture.

The Robert Wood Johnson Executive Nurse Fellows Program (2009) has identified five competencies that are essential for mentoring. These competencies may be related to ways in which DNP graduates may increase their level of expertise and eventually provide mentoring. The first competency is the ability to translate a strategic vision into a motivating message. Each time a DNP graduate expresses why he or she returned to school for a DNP degree, a strategic vision is shared, which serves to motivate others. This author is often told that she has inspired others to return to school either for nursing or for a graduate degree in nursing. The second competency is risk taking and creativity. Again, earning a new, innovative degree demonstrates risk taking and creativity. Further, the ability to complete a research project that is grounded in clinical practice also displays creativity. The third competency is the ability to understand and develop the self with regard to self-knowledge and individual motivation. DNP graduates are challenged through their DNP programs to know themselves, their individual motivation, as well as their own personal leadership styles. The choice to earn a DNP degree illustrates the awareness of the need for additional knowledge to meet the changing demands of health care. Further, the additional leadership skills they garner enable DNP graduates to develop awareness regarding their own strengths and weaknesses. DNP graduates are experts at knowing what they do not know and discovering ways to enrich their knowledge base. The fourth competency includes inspiring and leading change. DNP graduates will be leaders regardless of their area of expertise. They will be called on to inspire and guide others in times of change. The final competency is effective communication and interpersonal effectiveness. DNP graduates will mentor through their ability to engage in mutual and equal relationships. Many DNP graduates will have had previous experiences that involved hierarchical relationships with other

healthcare professionals. These experiences will serve to remind DNP graduates that successful mentoring relationships are built on empathy, compassion, respect, and nurturing behaviors. Therefore, DNP graduates will have sensitivity regarding what type of mentoring relationship is mutual and equal.

Precepting: The Ideal Opportunity to Mentor

For the DNP graduate in the clinical setting, precepting is often integrated into the clinical role. Precepting is a time-limited commitment that evolves into a teaching–learning relationship between student and preceptor. However, "mentoring is more than just training or precepting" (McKinley, 2004, p. 207). Mentoring has been described as a way to assist in human development, where one invests time, energy, and personal knowledge to enable another to grow and develop (McKinley, 2004). Although precepting differs from mentoring, precepting presents the perfect opportunity for DNP graduates in the clinical setting to become mentors.

Hayes (1998) studied the stories of students who felt they had experienced a mentoring relationship with their clinical preceptor. Specific descriptors were cited by the students related to their experiences. These specific descriptors included the following: a vested interest in the student, a love for teaching, openness, friendship, trust, acting as a life jacket, patience, sharing job advice, and role modeling kind, empathetic, competent patient care (Hayes, 1998). These characteristics mirror many of the leadership attributes previously discussed. Further, when thinking of a teacher/preceptor/clinical instructor who inspired, led, and truly made a difference in their lives, many DNP graduates will be able to recall similar experiences. Hence, self-reflection, previous experiences, and the skills garnered in a DNP program will enable DNP graduates to seize the opportunity to build mentoring relationships in the clinical setting.

McKinley (2004) wrote about mentoring in nursing and related three steps to the mentoring process that may foster successful mentoring relationships both in and out of the clinical setting: reflecting, reframing, and resolving. Reflecting involves the creation of the relationship (McKinley, 2004). This includes sharing personal information to build a common ground as well as discussing the goals of the relationship. DNP graduates in the preceptor role may share their personal journeys in nursing as a way to inspire and guide. Also, DNP graduates may ask students what their expectations are for the semester as well as share what they hope to accomplish while teaching. This author often advises students she precepts to ask all the silly questions, not just questions about clinical scenarios. Frequently, questions about certification, relationships with staff, and how to interview for a job are cited among the most valuable pointers students think they received during a clinical rotation. Reframing encourages connecting and allows the mentor to challenge the student (McKinley, 2004). DNP graduates may use their broadened knowledge base about information technologies to encourage students to look outside the box for

information. This may also be done by challenging students to integrate evidence-based practice when developing a plan of care. At this time, the DNP graduate may demonstrate these skills to the student and reinforce learning in an ongoing process. Melnyk et al. (2004) found that evidence-based practice (EBP) increased with mentorship from others utilizing EBP. These behaviors strengthen the relationship between mentor and student and allow the student to grow (McKinley, 2004). Resolving involves the mentor empowering the student to develop solutions (McKinley, 2004). This is when the foundation built by reflection and reframing is put into action. The DNP graduate allows the student to examine the options and consequences of the options. Previously it was mentioned that expertise means knowing the vision of what is possible (Benner, 1982). DNP graduates may have experienced this type of learning from mentors while acquiring new skills in their DNP programs. These experiences will allow DNP graduates to let the students own their solutions. This process is similar to DNP graduates developing and owning their solutions through their own evidence-based research projects—a process that came to fruition through the mentoring they once received.

■ Conclusion

The ways in which DNP graduates may shape the future of nursing through mentoring are numerous (please refer to **Table 3-7**). In the clinical setting DNP graduates are in the forefront of health care and therefore in a position to improve quality and healthcare outcomes. Mentoring new nurses, advanced practice registered nurses, and other healthcare professionals will ensure that the DNP graduates' focus on improved healthcare delivery will be a priority of the future of nursing practice.

Table 3-7 Tips for DNP Graduates Mentoring in the Clinical Setting

- Express an interest in students personally.
- Share personal experiences, especially personal setbacks or failures.
- Express a love for teaching.
- Stay open to ideas, input, and suggestions.
- Be willing to give advice about jobs, interviewing, and creating good staff relations.
- Role model empathetic and compassionate patient care.
- Motivate students to have a vision, especially a vision of themselves when they complete their degree.
- Challenge students to come up with their own solutions and empower them to own their solutions.
- Allow students to be wrong, and give constructive, noncritical feedback when they are wrong.
- Create opportunities to be creative and utilize evidence-based practice or information technology to develop solutions.
- Role model effective interdisciplinary collaboration by demonstrating or role playing the discussion of care with other disciplines.

Interviews with DNP Clinicians: Then and Now

The following interviews with Doctor of Nursing Practice (DNP) graduates provide invaluable insight from practicing clinicians with DNP degrees.

Interview with Dr. Kathleen A. Payson

Kathleen A. Payson, DNP, APRN, BC is a faculty member at Wayne State University School of Nursing in Detroit, Michigan. She is also a private practice women's health and internal medicine adult nurse practitioner.

Then . . . 2008

Dr. Payson, could you please describe your current position?

I am a contracted services nurse practitioner in a women's health and internal medicine private practice as well as part-time faculty at Wayne State University in Detroit, Michigan. I plan to continue my clinical practice with an emphasis on pursuing a joint role in academia and nursing research. In addition, I plan on completing my Osteoporosis Prevention Research Project—Phase 2 with a goal to publish the final outcomes.

Dr. Payson, what motivated you to return to school for a DNP degree?

Overall, I liked the concept of the DNP role because it focused more on the clinical aspect of nursing at the doctorate level. First and foremost, the motivation for me to advance my education was due to our country's critical nursing shortage—a shortage that will worsen when our men and women return from war and one that has already been significantly impacted by the aging population in America. The realization and impact of the nursing shortage became more evident when I started my academic role as a WSU nursing educator. There are not enough professors to handle the demand for nurses entering the nursing/healthcare arena. Secondly, being a nurse is a motivating force alone.

I would also like to mention that the accelerated pace of the DNP program at Oakland University (OU) in Rochester, Michigan was an attraction to apply for the DNP program. OU has a stellar reputation for higher education along with being the first DNP program in the state of Michigan. Education is the power and the highway to make a difference within the discipline of nursing! Having the opportunity for advancement in nursing to better serve my patient population was the utmost priority. In addition, a Doctor of Nursing Practice degree can facilitate the growing need to keep pace towards clinical and technological skills required for the future of health care.

Dr. Payson, could you describe your experience in a DNP program?

The DNP experience at OU prepared me to be in the forefront and to become a leader in nursing whether it is in the academic, clinical, or research environment. The nurse leaders who were part of the DNP program encouraged us to be strong, flexible, and to excel within the discipline of nursing. This advanced preparation in leadership responsibilities has influenced my involvement in healthcare policy, thereby enabling significant changes toward health promotion/education. For example, new experiences and educational opportunities include, and are not limited to, writing a grant to support my research project towards osteoporosis prevention among postmenopausal women utilizing a nurse-led educational intervention. These educational opportunities created excitement to further explore various avenues in nursing research, thus enhancing health care for all.

Dr. Payson, how has your practice changed since earning a DNP degree?

As an APRN with a DNP degree, I am better prepared to become an expert in managing the complex balance between quality of care, access to care, and fiscal responsibilities. A difficult task to accomplish without an advanced degree! Ultimately, health care is a business, and we are all entrepreneurs! I feel that the DNP degree is the stepping stone for the future of nursing, allowing improved quality and continuity of health care. Additionally, there has been great respect shown among my colleagues, staff, and patients with earning the Doctor of Nursing Practice degree.

Dr. Payson, how has your view of nursing and nursing practice changed since earning a DNP degree?

It has changed considerably and with a great deal of confidence. My understanding of nursing has evolved by realizing the influence that we have among ourselves and with knowing that power in numbers can make significant changes. We must take a stance and support one another by promoting our profession and learn to overcome obstacles in order for enormous changes in health care to occur. Nursing must continually promote further education in our profession, ensuring enough leaders and educators for our next generation of nurses.

The afforded privilege of acceptance and completion of the DNP degree has also given me the perseverance to go forth and continue to strive and commit myself to excellence in the nursing discipline. I also feel it is imperative for nursing to have nursing leaders prepared at the doctorate level as many other nonhealthcare professions require. The demand for nurses continues to escalate, and leaders in nursing are in the forefront to make the public aware of both the art and science of nursing.

Dr. Payson, how have others reacted to you earning a DNP degree?

Favorably and with great respect, especially from those who know what a nurse practitioner role is. I have found that this new role has required a huge educational component. I now make a concerted effort and spend a great deal of time

educating my colleagues, patients, family, and friends about the DNP degree and our evolving roles.

Dr. Payson, have your responsibilities in the clinical setting changed since earning a DNP degree?

Yes, the DNP degree has prepared me to take on leadership positions in research and clinical care delivery, thereby allowing improved patient outcomes and enhanced system management among my patient population I serve.

Dr. Payson, would you encourage other advanced practice registered nurses to return to school for a DNP degree?

Yes, because of the emerging clinical doctoral focus emphasizing clinical practice-oriented leadership development. The goal of the DNP degree is to prepare the APRN as a nurse scientist encompassing investigative skills of a researcher as well as the clinical and leadership skills that are required in this ever-changing healthcare system. Health outcomes measurement, healthcare economics, statistical analysis, and informatics are common focus areas and a major trend for the future. Furthermore, these areas were incorporated and a main focus in Oakland University's first DNP program.

Dr. Payson, if given the opportunity, would you return to school to earn a DNP degree again?

Absolutely, without a doubt. Since the program, my level of maturity, motivation, self-confidence, and strength of commitment to provide leadership for the nursing role have been greatly enhanced. Knowledgeable clinicians are required to navigate healthcare systems. The discipline of nursing must continually strive to synthesize and integrate various bodies of knowledge, thereby allowing enhanced quality care in an interdisciplinary evidence-based healthcare environment.

Now . . . 2011

Dr. Payson, we discussed your nursing background and education last time we spoke. Could you please describe your current position?

My current position is an adult nurse practitioner, with a Doctor of Nursing Practice degree, within an urban women's health care setting. My role within the practice is an administrator and provider of direct patient care.

Dr. Payson, has your position evolved at all over the last 4 years since earning a DNP degree? If so, how?

Yes, my position has evolved since earning my DNP degree. The advanced training and education has permitted me to function to the fullest capacity as a healthcare provider toward health promotion and disease prevention in the OB/GYN setting. This role has given me additional respect from my peers and has allowed me the opportunity to partner with physicians in redesigning women's health care, therefore leading to improved health outcomes.

Dr. Payson, has your clinical/academic practice evolved at all since earning a DNP degree?

Yes, my clinical/academic practice has evolved since the DNP degree. I became more involved in actively participating toward the advancement of nursing by serving as adjunct faculty, nurse educator/lecturer, and as a student preceptor for the adult nurse practitioner program at Wayne State University in Detroit, Michigan.

Dr. Payson, have you experienced a salary or responsibility increase since earning your DNP degree?

Yes, in reviewing the current DNP salary averages, I am at the top of the salary range for the DNP profession. Since earning a DNP degree, my scope of practice has been enhanced, resulting in an increase in my hourly rate, an annual bonus based on profitability, and 2 additional weeks of vacation.

Dr. Payson, have your patients/students adapted to your degree preparation? How did you educate your patients/students about your degree preparation?

Yes, my staff, patients and students have adapted to my degree preparation. The transition took a great deal of time in explaining the role of a DNP prepared nurse practitioner, but perseverance has paid off. Repetition is the "key." It was critical to first educate my staff to appropriately explain my role and appropriately address my title to patients, family members, ancillary departments, or to any healthcare provider whether communicated in person, by phone, or documentation. My credentials are listed on the building directory, door, and our phone. The office phone message clearly informs callers of my title stating Dr. Payson, our nurse practitioner. This change in credentials from NP to DNP was a learning curve for all. Having to explain or defend my role is now limited to new patients who are unfamiliar with the DNP title.

Dr. Payson, do you use the title "Dr." in your clinical or academic setting? If so, how do you introduce yourself?

Yes, how I introduce myself is as follows: Good morning or afternoon, I am Dr. Payson, the nurse practitioner.

Dr. Payson, would you continue to encourage others to return to school for a DNP degree? Why or why not?

Absolutely! I will always encourage others to further their education from a NP to DNP degree. Attaining a doctoral degree in nursing advances and shapes the nurse practitioner role and the entire future of nursing. Advanced education facilitates utilization of evidence-based healthcare practice and the implementation of relevant research into practice. These higher standards of patient care ultimately enhance beneficial changes toward advancing health outcomes.

Dr. Payson, do you agree with the AACN's recommended target date of 2015 for the DNP degree as entry into practice for advanced practice registered nurses? If so, how do you recommend we continue to strive toward this goal?

I agree with AACN's recommendation for the DNP degree as entry into practice for APRNs but I do not agree with the targeted date of 2015. We are only 4 years out and with the current shortage of nurses and nurse educators; this will be a difficult task to attain and ultimately may compromise patient health care. It is imperative to continually promote the purpose and goal of the DNP degree as entry into practice for APRNs. This can be effectively achieved by our colleagues within the nursing profession since we are the largest segment of the nation's healthcare workforce. Continued efforts in educating all health care professionals, staff, students, and most importantly our patient population, is the ultimate driving force to accomplish the AACN's future goal. "Word of mouth" can either promote or harm our profession. Therefore, it is ultimately our responsibility to provide the "best" care so that our patient's are willing to promote and support our advanced role. Other avenues are to utilize available health information systems, participate in healthcare forums and research studies, become published, and to be actively involved in the public healthcare policy arena.

Interview with Dr. Sheila Behler

Sheila Behler, DNP, APRN, BC is a nurse practitioner at John D. Dingell VA Medical Center in Detroit, Michigan.

Then . . . 2008

Dr. Behler, could you please describe your practice setting?

I am certified as a family practice nurse practitioner. I work full time in primary care at John D. Dingell VA in Detroit, Michigan. I have a caseload of 1,400 to 1,500 patients. Most have an element of mental health issues and substance dependence issues. Most also have chronic diseases like diabetes and hypertension. We are frequently overbooked for several appointments due to the government mandate that all veterans must be seen within 30 days. My clinic runs from 0800 until 1600, but I am always there by 0700 to review labs, X-rays, consultation reports, fill out forms, and a variety of other issues that need follow-up.

Dr. Behler, what motivated you to return to school for a DNP degree?

I decided to return to school for my DNP degree because of the appeal that this was the last step I could take towards validating my profession. I already had a master's degree in nursing and two postmaster's certificates. I felt this would be

the final frontier, so to speak. Additionally, I have always enjoyed learning and challenging myself to learn.

Dr. Behler, could you describe your experience in the DNP program?

The rigor of the program enabled me to enhance my organizational skills and increase my focus. The distance education aspects of the program were unique but also very challenging. I learned to prioritize due to the fact that I worked full time while attending school. Also, I am very proud to have been part of the first DNP program in Michigan.

Dr. Behler, how has your practice changed since earning a DNP degree?

I am very much more focused on research-based standards for care. I am not swayed by new medications unless I have seen the articles in my journals and read that they are indeed more beneficial then other less costly ones. The knowledge I gained in the DNP program validated for me the importance of evidence-based practice.

Dr. Behler, how has your view of nursing and nursing practice changed since earning a DNP degree?

As DNP graduates I feel we have a professional obligation to provide leadership to fellow NPs. I also feel the need to further educate the public regarding what advanced practice registered nurses are, including what a DNP degree is. We also have an obligation to incorporate evidence-based research into our practice. In this area in particular, others look to us for leadership, even though we are in a clinical role.

Dr. Behler, how have others reacted to the knowledge and skills you garnered in the DNP program?

People are proud, both my coworkers and especially my patients. I presented a PowerPoint presentation of my research to others in my practice setting, and they were delighted to see my research as well as the outcomes. After the presentation, one of the physicians in our group asked me about hypertension medications for his personal use in managing his health. He is using the medication I suggested to control his hypertension that was based on my research with evidence-based practice. This reinforces our role in educating others about evidence-based practice and how we can mentor others to change their practice patterns.

Dr. Behler, have your responsibilities changed in your clinical setting since earning a DNP degree?

Yes, I am being asked to be on more committees like the credentialing committee for all primary care providers to bring a higher standard of care. Also, I have been more involved in research projects, including applying for a grant related to my work in hypertension. I plan to continue to pursue research, and I also believe it is important to publish our work and contribute to nursing's body of knowledge. New opportunities have also been presented for me in my practice setting, such as initiating an educational program for registered nurses to finish their bachelor's degree. Finally,

I should also mention the constant need to educate patients regarding nursing and this newer terminal degree. Many of my patients say, Oh, you're a doctor now, are you leaving? I constantly provide reassurance and education regarding my DNP degree. This is part of having a practice-focused doctorate.

Dr. Behler, would you encourage other advanced practice registered nurses to pursue a DNP degree?

Yes, I would. I feel the more we push ourselves professionally, the better the health outcomes will be for our patients. I also feel it is important to grow as a nurse.

Dr. Behler, if given the opportunity, would you earn a DNP degree again?

Yes, I would. It was without a doubt one of the hardest things I have done in my life, and I am still, after 6 months out, amazed I did so much and learned so much. I know I give better patient care because of the DNP degree.

Now . . . 2011

Dr. Behler, we discussed your nursing background and education last time we spoke. Could you please describe your current position?

I am still employed in the same position, providing primary health care to veterans whom I enjoy.

Dr. Behler, has your position evolved at all over the last 4 years since earning a DNP degree? If so, how?

The position itself has not evolved into anything different only because I have chosen to have it remain the way it is. My preference is to provide direct patient care based on the latest evidence-based research. I have been fortunate to be able to precept nurse practitioner students, which is also very gratifying as we need to replace ourselves as some of us prepare to retire.

Dr. Behler, has your clinical practice evolved at all since earning a DNP degree?

Without a doubt it has. I read research articles with more understanding and critique as to which ones have merit that influences my clinical practice.

Dr. Behler, have you experienced a salary or responsibility increase since earning your DNP degree?

Yes, I am very happy to say I have and I have also published my original research, which merited a small bonus and acknowledgement.

Dr. Behler, have your patients adapted to your degree preparation? How did you educate your patients/students about your degree preparation?

My patients love it that I am a doctor nurse! I explain that a doctoral prepared nurse does extra study and rigorous research to assist in providing the best care for them.

Dr. Behler, do you use the title "Dr." in your clinical or academic setting? If so, how do you introduce yourself?

Always and I am very clear; I state I am Dr. Behler, a nurse practitioner. Sometimes this leads to further discussions, sometimes not.

Dr. Behler, would you continue to encourage others to return to school for a DNP degree? Why or why not?

Yes, keeping in mind this is a clinical degree and you may or may not change careers, it is about one's own self-growth, the growth of our profession to establish standards and for our patients.

Dr. Behler, do you agree with the AACN's recommended target date of 2015 for the DNP degree as entry into practice for advanced practice registered nurses? If so, how do you recommend we continue to strive toward this goal?

I do because currently when you become a nurse practitioner there are several avenues to do this which I find confusing for myself as well as my patients. You could have a women's health practitioner working in urology, I know someone who does this and is an expert but with the doctoral degree you are confident that person has looked at research and standards with a critical eye and are not influenced by some studies that may not have merit. It sets a standard across the board.

Interview with Dr. Andrea Kwasky

Andrea Kwasky, DNP, APRN, BC is a family psychiatric/mental health nurse practitioner

Then . . . 2008

Dr. Kwasky, could you please describe your practice setting?

I work in a residential treatment center for children and adolescents who live with severe mental health issues. I started this position shortly before entering the program, which made the choice to also return to school particularly interesting. The residents that I care for range in age from 9 to 19. They have all had multiple treatment failures within the acute care inpatient setting and have had great difficulties at home, school, and within the community. Residents generally reside within the program from 6 months to several years until they can be reintegrated back into the community at a less intense level of treatment. My role is to improve the quality of care for vulnerable youth who have not been able to be successful in previous treatment. I collaborate with a treatment team to provide staff education, milieu management, crisis intervention, and medication management.

Dr. Kwasky, what motivated you to return to school for a DNP degree?

A fellow nurse practitioner introduced me to the DNP degree. I became aware that Oakland University was planning to start the first program in Michigan. After further investigation of the degree and various universities that offered this type of program, I decided to apply for the first and only program in existence in Michigan. I was excited to once again feel like a pioneer blazing a new nursing trail within the state of Michigan as my bachelor of science degree with a major in nursing was a community-based program and the first of its kind in Michigan (Western Michigan University). I knew that the DNP program would be challenging, but with that came the great reward of being on the forefront of furthering the nursing profession.

Dr. Kwasky, were there any additional factors that motivated you to return to school for a DNP degree?

Yes, at the time I was accepted to the program I was 29 years old. It was in a time of self-reflection and transition in my life. I had recently lost my mother, and she had always been a very supportive force behind the various goals that I had set for myself. The DNP program presented an opportunity to enhance my knowledge base in my field and allow me to refocus my goals. I am a believer that education and knowledge are with you everywhere you go. I am not a career student, and I have worked full time most of my nursing career. However, I love to learn, and I feel that anything I can do to enhance my nursing practice is essential to improve the care of my patients.

Also, I would like to add that I was the youngest DNP student in my class. I add this to emphasize the point that despite nursing's unwritten rule that one must obtain experience before pursuing higher education, I feel that one can gain experience along the way while enhancing their education. I want to encourage others like myself to not feel intimidated about returning to school early in your nursing career. You can increase your experience as you increase your knowledge base!

Dr. Kwasky, could you please describe your experience in the DNP program?

Challenging, exhausting, rewarding, excruciating, and well worth every moment. Not only did I gain valuable skills and knowledge related to research, theory, as well as how to navigate the political process, but also I was able to cultivate relationships with a cohort of visionary nursing leaders.

Dr. Kwasky, how has your practice changed since earning a DNP degree?

The primary way that my practice has changed is in the way that I conceptualize nursing. Additionally, I now feel more of a responsibility to mentor and cultivate relationships with individuals who are interested in becoming nurses or individuals who have just entered a nursing program. Several of the residential care specialists that I work with have just entered nursing school. I feel an obligation to discuss my experiences within the profession of nursing and to expose them to all of the possibilities that await them. In fact, I will be teaching a mental health clinical rotation with a group of second-degree students this fall.

I also have had the pleasure to act in the role of public relations and marketing for the "Doctor Nurse" within my community. Educating the public about [the] role of the DNP has certainly been interesting.

Dr. Kwasky, how has your view of nursing and nursing practice changed since earning your DNP degree?

I am better able to articulate the difference between discipline and the profession of nursing. I have a more intimate understanding of the theoretical and historical background of my chosen field.

Dr. Kwasky, how have others reacted to your DNP degree and the skills/knowledge you garnered in the program?

With questions, many questions. For example, Why didn't you just go to medical school? People are curious, and the general public especially does not understand the DNP degree. I more fully realize the obligation I have to educate patients, families, other healthcare professionals, and the public about my field and my degree. Also, I feel an obligation to become involved in public policy and impact the future of nursing educational standards. The DNP degree is now the terminal practice degree. I feel that policy protecting our right to use the title "doctor" and represent our field as doctoral-prepared nurse[s] is important. Policies that would prevent this are rapidly coming to the forefront, perhaps sparked by our higher educational standards. I feel DNP graduates as well as the nursing profession as a whole need to unite and become involved in policies that affect nursing and health care in general.

Dr. Kwasky, have your responsibilities changed in your clinical setting since earning a DNP degree?

The responsibilities outlined in my job description have not changed as a result of earning the DNP degree. However, the accountability that I have to myself, the patients that I care for, and the nursing profession have dramatically shifted. I have learned to think about what I do in a more global way. What I mean by this is that the methodology by which I practice has changed. I am always seeking to identify the evidence and rational[e] behind my interventions.

Dr. Kwasky, would you encourage other advanced practice registered nurses to return to school for a DNP degree?

Yes! However, I would caution others that with great knowledge comes great responsibilities. The educational process does not end with the DNP degree. Prospective students should also know that the way they practice will never be the same. Instead of perhaps feeling frustrated by this, they need to feel a renewed sense of responsibility to educate others about their degree and using their new knowledge and skills to continually improve the quality of heath care they provide.

Dr. Kwasky, if given the opportunity, would you earn a DNP degree again?

This is an interesting question. Am I glad that I have obtained the degree? Absolutely! However, being on the forefront of something that the public has

never been exposed to is not for everyone. Every conversation with a new patient or family starts out with, Hello, I am Dr. Kwasky. The children I work with call me Dr. Andrea. I am a family psychiatric/mental health nurse practitioner, and I also have a doctorate in nursing practice. I work in collaboration with the physician. This relates back to the challenge for DNP graduates to educate others about our profession, our degree, and our role in healthcare delivery. As DNP graduates, we know who we are, we know where we have been, and we know we are different. The challenge lies in using this knowledge every day to improve healthcare delivery.

Now . . . 2011

Dr. Kwasky, we discussed your nursing background and education last time we spoke. Could you please describe your current position?

Currently, I hold a full-time assistant professor faculty position with the University of Detroit Mercy, McAuley School of Nursing. In addition to teaching I remain clinically immersed in the area of mental health though my advanced practice role with children and adolescents at a long-term residential treatment center for children/adolescents who have significant mental health issues.

Dr. Kwasky, has your position evolved at all over the last 4 years since earning a DNP degree? If so, how?

Yes, after obtaining my DNP degree from Oakland University I continued my full-time employment at the residential treatment center that I previously referenced. I remained there while I contemplated my career path and how I could best utilize the knowledge and skills gained from my recent educational endeavor. After thoughtful consideration I decided to challenge myself by pursuing a career educating future nurses. As I look back on my own academic career, I can specifically identify nursing mentors and role models that influenced my path. I wanted to share my passion for nursing and commitment to vulnerable populations with students in an effort to engage them in the important work that we do as professional nurses. While working with students in their mental health clinical rotation I tell them that the only thing that I can think of that is better than working with the children and adolescents at the treatment center is hopefully igniting the spark in one of them to want to do something similar for the members of our population to have been marginalized and stigmatized.

Dr. Kwasky, has your clinical/academic practice evolved at all since earning a DNP degree?

In both realms of academia and practice I find that I am able to more effectively evaluate systems issues and understand the multiple layers (individual, systemic, programmatic, and political) that can contribute to both a problem or solution.

Dr. Kwasky, have you experienced a salary or responsibility increase since earning your DNP degree?

I have not experienced a salary increase as a result of earning my DNP. One of the goals of DNP preparation is to assist with education of future nurses. This is certainly not as financially lucrative as being clinically immersed full time; however, the rewards are great. Therefore, I think that being an educator must be something that one is passionate about. With regard to an increase in responsibility, I have not been formally given more responsibility. However, with advanced education comes a responsibility to act on that knowledge. Since completing my DNP I have published and have several articles in process, written and obtained grant funding for a study related to vitamin D and depression in young women, established a relationship with a PhD mentor who has been instrumental in partnering to conduct research, I attend conferences to disseminate information related to my specialty area, and I continue to grow in my newest role as educator.

Dr. Kwasky, have your patients/students adapted to your degree preparation? How did you educate your patients/students about your degree preparation?

I teach an introductory nursing course titled Self-Awareness for Nurses in the Interdisciplinary Environment. The focus of the course is to develop a better understanding of what it means to be a professional nurse. Part of my responsibility as an educator is to help the students understand the various ways in which nurses are educated. This includes teaching the students about the DNP degree. I also have the opportunity to work with nursing students who are nearing graduation. They generally have misconceptions about the degree and frequently have very good questions about academic preparation and the AACN's recommended target date of 2015 for the DNP degree as entry into practice for advanced practice registered nurses. When I explain to the students that the DNP is a degree, not a role, they seem to have a better understanding. Students and patients seem to have adapted well as long as they are educated appropriately. However, in my opinion, some controversy still exists regarding the belief that the DNP is a terminal degree for those that may not value practice as scholarship, which seems ludicrous in a practice-driven profession. Additionally, I still think that our physician counterparts require education regarding this degree and how we can partner with them in the healthcare environment.

Dr. Kwasky, do you use the title "Dr." in your clinical or academic setting? If so, how do you introduce yourself?

Yes, I use my title as "Dr." in both my clinical and academic setting. In the clinical setting when I am working with children, I am Dr. Andrea and in the academic setting I am Dr. Kwasky. I use the same explanation that I did when I first earned my degree. I educate the children, adolescents, families, students, and other healthcare providers that I am a family psychiatric mental health nurse practitioner who also has earned a doctoral degree in nursing practice.

Dr. Kwasky, would you continue to encourage others to return to school for a DNP degree? Why or why not?

Yes. For those individuals who are clinically immersed and would like to pursue advanced education in nursing I think that the DNP is a great option.

Dr. Kwasky, do you agree with the AACN's recommended target date of 2015 for the DNP degree as entry into practice for advanced practice registered nurses? If so, how do you recommend we continue to strive toward this goal?

I think that it is an interesting idea. With so many entry levels into practice, I can see why this goal has been established. I hear many senior nursing students who are seeking a BSN to DNP program to attend as soon as they have completed their undergraduate degree. I think that students should be cautious about this and that universities should be cognizant that the DNP teaches higher level concepts and thinking. Therefore, students should be required to have a minimum number of practice hours completed prior to admission. Otherwise, some concepts can be lost in translation as students are trying to assimilate concepts that they only know in theory and have not been exposed to in practice.

■ ■ ■

■ A DNP Graduate's Personal Journey: Who, Me?

I always knew I would go back to school after earning a master's degree in nursing. I was impatiently waiting for a true practice doctorate to become a reality. I intended to stay involved in nursing practice as an advanced practice registered nurse. Therefore, when the opportunity to earn a DNP degree in the first program in Michigan presented itself, I was the first student to apply. I wasn't quite sure in graduate school what the result would be upon completing my degree; I just knew I needed to learn more. Now, as a DNP graduate clinician, I am beginning to understand how a DNP degree enhances my ability to deliver and improve health care. I am more aware of the needs of my patients as individuals as well as members of communities, and I have developed more complex skills to meet their needs. Moreover, I have a more acute awareness of the needs of my profession and the increasing complexities in health care today.

The skills I developed through the DNP program are reflected in how I care for my patients. I regularly evaluate and translate evidence-based practice for my patients and seek new ways to integrate this information into the plan of care. When patient care is not optimal due to systems or organizational issues, I use my leadership and collaboration skills to develop solutions to improve care. I mentor others in nursing who wish to pursue a DNP degree and have developed a specialty preceptor program within my clinical setting. Finally, I am committed to promoting nursing, the nurse practitioner role, and the DNP degree through pedagogical methods that will increase others' understanding.

I believe I knew a great deal about nursing when I was prepared at the master's degree level. Earning a DNP degree not only broadened this knowledge base but also made me more aware of my role in nursing practice and healthcare delivery. I am also more aware of where nursing-as a practice profession—has been, where we are going, and where we need to be. . Now, almost 5 years since graduating with a DNP degree, I have begun to realize the impact this degree will have on health care. As leaders and practice experts, DNP graduates are beginning to shape the future of health care by influencing healthcare policy and the evaluation and translation of evidence-based practice. I am very proud to be a DNP graduate and am more fully committed to promoting the DNP degree.

■ Why a DNP for Clinicians?

In the beginning of the chapter, the question, How will the clinician's role change or benefit from earning a DNP degree? was posed. After a discussion regarding the many aspects of the DNP graduates' role as clinician, it is this author's anticipation that a broader understanding has developed. Many readers will turn to this section to look for the answer to, Why a DNP for clinicians? As a DNP graduate who finished her degree almost 5 years ago, this author has realized the answer to this question is somewhat complex. Healthcare delivery is improved through expertise in evaluating, translating, and implementing evidence-based practice, information technology, interprofessional collaboration, and mentoring. However, one may not fully appreciate the benefits of the DNP degree until some time after graduation. The experience of doctoral study also shapes and defines how clinicians' roles are actualized after graduation. Clinicians should understand that realizing the benefits of a DNP degree is a process that will continue to unfold years after graduation. Be assured, however, that this process is worthwhile, rewarding, and exciting. Nursing is uniquely positioned to improve health care through increased knowledge and education. As Dr. Kathleen Payson so accurately stated, "Education is power and the highway to make a difference."

Summary

- Advanced practice nursing and advanced nursing practice are often used interchangeably but actually have different meanings. Advanced nursing practice describes what nurses do when they provide nursing care. Advanced practice nursing describes the whole field of specific types of nursing practice (Bryant-Lukosius, et al., 2004).
- The APRN Consensus Model defines advanced practice nursing as well as regulation for licensure, accreditation, certification, and education (LACE) of APRNs.
- Evidence-based practice (EBP) serves to promote optimal healthcare outcomes, which are based on critically reviewed clinical evidence for individual patients, families, and communities.

- Although all DNP graduates are expected to evaluate, translate, and implement EBP into their particular settings, DNP graduates in clinician roles have a vantage point of EBP due to their direct impact on care in the clinical setting.
- Barriers to EBP exist and include resistance to change, lack of preparation regarding EBP, lack of resources to EBP, lack of belief in EBP, and poor motivation to investigate EBPs.
- DNP graduates in the clinical setting, as well as other settings, can reduce barriers to EBP by defining EBP to others, providing education regarding EBP, providing consultation in researching EBP, and mentoring others regarding EBP outcomes.
- DNP graduates can evaluate and translate EBP by asking relevant questions in the clinical setting, reading literature reviews regarding pertinent topics, starting a journal club in their practice setting, communicating to others regarding EBP, and organizing educational programs to increase the knowledge of other healthcare professionals in their setting.
- Information technologies serve to manage, organize, and process health information (Zytkowski, 2003) in an effort to improve the quality of care and healthcare outcomes.
- The IOM reports in 2000, 2001, and 2003 all express an increased need for healthcare professionals to increase proficiency in information technologies to meet the complex demands of health care.
- Nursing uses information technologies to improve care, improve care delivery, and provide accurate, up-to-date information to patients. This is done through the use of PDAs, telehealth technologies, and reference librarians for consultation regarding information technology resources.
- Interprofessional collaboration is more than just getting along. DNP graduates are perfectly positioned to influence and exemplify interprofessional collaboration.
- Improved communication has been shown to be the most effective avenue to decrease barriers to interprofessional collaboration.
- DNP graduates will be looked to as mentors in health care. This involves DNP graduates in clinician roles displaying expertise, even when they may feel like novices regarding the new skills they have garnered in their DNP programs.
- Precepting students presents the ideal opportunity for DNP graduates in the clinical setting to act as mentors.
- DNP graduates may shape the future of nursing and influence the improvement of healthcare outcomes by mentoring others in the healthcare arena.

Reflection Questions

1. Do you think you understand the importance of evidence-based practice in nursing and in health care?
2. Do you think you evaluate and translate EBP into your nursing practice?

3. What ways can you think of to further evaluate and translate EBP into your nursing practice?
4. Do you think nursing has embraced information technologies?
5. In what ways do you think you could utilize information technologies in your nursing practice?
6. Do you think interprofessional collaboration is important to meet the demands of a complex healthcare system?
7. In what ways can you improve interprofessional collaboration in your setting?
8. Do you think you have, or have had, a mentor? If so, how can your experience with a mentor improve your ability to mentor others?
9. In what ways do you think DNP graduates in clinician roles, as well as other roles, have the opportunity to shape the future of nursing?

References

American Association of Colleges of Nursing (AACN). (2006). *Essentials of doctoral education for advanced nursing practice.* Retrieved October 14, 2011, from http://www.aacn.nche.edu/publications/position/DNPEssentials.pdf

American Association of Critical-Care Nurses (AACN). (2005). *AACN standards for establishing and sustaining healthy work environments: A journey to excellence.* Retrieved October 14, 2011 from http://www.aacn.org:88/WD/HWE/Docs/HWEStandards.pdf

American Nurses Association (ANA). (1995). *Nursing's social policy statement*. Washington, DC: Author.

American Nurses Association (ANA). (2001). *Scope and standards of nursing informatics practice*. Washington, DC: Author.

Apker, J., Propp, K., Zabava Ford, W., & Hofmeister, N. (2006). Collaboration, credibility, compassion, and coordination: Professional nurse communication skill sets in health care team interactions. *Journal of Professional Nursing, 22*(3), 180–189.

Benner, P. (1982, March). From novice to expert. *American Journal of Nursing, 82*(3), 402–407.

Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice.* Menlo Park, CA: Addison-Wesley.

Brown, S. J. (1998). A framework for advanced practice nursing. *Journal of Professional Nursing, 14*(3), 157–164.

Bryant-Lukosius, D., DiCenso, A., Browne, G., & Pinelli, J. (2004). Advanced practice nursing roles: Development, implementation, and evaluation. *Nursing and Health Care Management and Policy, 48*(5), 519–529.

Carroll, K., Bradford, A., Foster, M., Cato, J., & Jones, J. (2007). An emerging giant: Nursing informatics. *Journal of Nursing Management, 38*(3), 38–42.

Consensus model for APRN regulation: Licensure, accreditation, certification & education. (2008). Retrieved October 14, 2011 from http://www.aacn.nche.edu/education-resources/APRNReport.pdf

Courtney, K., Demiris, G., & Alexander, G. (2005). Information technology: Changing nursing processes at the point-of-care. *Nursing Administration Quarterly, 29*(4), 315–322.

Cowan, M., Shapiro, M., Hays, R., Abdelmonem, A., Vazitani, S., Ward, C., et al. (2006). The effect of a multidisciplinary hospitalist/physician and advanced practice nurse collaboration on hospital costs. *Journal of Nursing Administration, 36*(2), 79–85.

Curran, C. (2003). Informatics competencies for nurse practitioners. *AACN Clinical Issues, 14*(3), 320–330.

Davies, B., & Hughes, A. M. (1995). Clarification of advanced nursing practice: Characteristics and competencies. *Clinical Nurse Specialist, 9*(3), 156–160.

Dracup, K., & Bryan-Brown, C. (2004). From novice to expert to mentor: Shaping the future. *American Journal of Critical Care, 13*(6), 448–450.

Dreyfus, S., & Dreyfus, H. (1980). *A five stage model of the mental activities involved in directed skill acquisition.* Unpublished doctoral study supported by the Air Force Office of Scientific Research, USAF (contract F49620-79-C0063), University of California, Berkeley.

Egerod, I., & Hansen, G. M. (2005). Evidence-based practice among Danish cardiac nurses: A national survey. *Journal of Advanced Practice, 51*(5), 465–473.

Evidence-based. In E. McKean (Ed.), *New Oxford American Dictionary* (2nd ed.) [Computer software]. New York: Oxford University Press.

Fink, R., Thompson, C. J., & Bonnes, D. (2005). Overcoming barriers and promoting the use of research in practice. *Journal of Nursing Administration, 35*(3), 121–129.

Gaumer, G., Koeniger-Donohue, R., Friel, C., & Sudbay, M. (2007). Use of information technology by advanced practice nurses. *Computers, Informatics, Nursing, 25*(6), 344–352.

Gerardi, D., & Fontaine, D. (2007). True collaboration: Envisioning new ways of working together. *AACN Advanced Critical Care, 18*(1), 10–14.

Gibbs, L. (2003). *Evidence-based practice for the helping professions: A practical guide with integrated multimedia.* Pacific Grove, CA: Brooks/Cole-Thompson Learning.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence.* Boston: Harvard Business School Press.

Graves, J., & Corcoran, S. (1989). The study of nursing informatics. *Image: Journal of Nursing Scholarship, 21*(4), 227–231.

Greiner, A. C., & Knebel, E. (Eds.). (2003). *Health professions education: A bridge to quality.* Washington, DC: National Academies Press.

Hallas, D., Butz, A., & Gitterman, B. (2004). Attitudes and beliefs for effective pediatric nurse practitioner and physician collaboration. *Journal of Pediatric Health Care, 18*(2), 77–86.

Hamric, A., Spross, J., & Hanson, C. (2005). *Advanced practice nursing: An integrative approach* (3rd ed.). St Louis, MO: Elsevier Saunders.

Hayes, E. (1998). Mentoring and _self-_efficacy for advanced practice nursing practice: A philosophical approach for nurse practitioner preceptors. *Journal of American Academy of Nurse Practitioners, 10*(2), 53–57.

Hudson, K., Duke, G., Haas, B., & Varnell, G. (2008). Navigating the evidence-based practice maze. *Journal of Nursing Management, 16*(4), 409–416.

IMIA-NI: The Nursing Informatics Special Interest Group. (1998). Nursing informatics definition. Retrieved June 5, 2008, from http://www.imiani.org

Institute of Medicine (IOM). (2001). *Crossing the quality chasm: A new health system for the 21st century.* Washington, DC: National Academies Press.

Jennings, B. M., & Rogers, S. (1988). Merging nursing research and practice: A case of multiple identities. *Journal of Advanced Nursing, 13*(6), 752–758.

Knaus, W., Draper, E., Wagner, D., & Zimmerman, J. (1986). An evaluation of outcome from intensive care in major medical centers. *Annals of Internal Medicine, 104*(3), 410–418.

Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds). (1999). *To err is human: Building a safer health system.* Committee on Quality of Health Care in America, Institute of Medicine. Washington, DC: National Academies Press.

McKay, C., & Crippen, L. (2008). Collaboration through clinical integration. *Nursing Administration Quarterly, 32*(2), 109–116.

McKinley, M. (2004). Mentoring matters: Creating, connecting, empowering. *AACN Clinical Issues, 15*(2), 205–214.

Melnyk, B. (2002). Strategies for overcoming barriers in implementing evidence-based practice. *Pediatric Nursing, 28*(2), 159–161.

Melnyk, B. (2005). Advanced evidence-based practice in clinical and academic settings. *Worldviews on Evidence-Based Nursing, 2*(3), 161–165.

Melnyk, B., & Fineout-Overholt, E. (2005). *Evidence-based practice in nursing and healthcare: A guide to best practice.* Philadelphia: Lippincott Williams & Wilkins.

Melnyk, B., Fineout-Overholt, E., Feinstein, N., Li, H., Small, L., Wilcox, L., et al. (2004). Nurses' perceived knowledge, beliefs, skills, and needs regarding evidence-based practice: Implications for accelerating the paradigm shift. *Worldviews on _Evidence-_Based Nursing, 1*(3), 185–193.

Melnyk, B., Fineout-Overholt, E., Feinstein, N., Sadler, L., & Green-Hernandez, C. (2008). Nurse practitioner educators' perceived knowledge, beliefs, and teaching strategies regarding evidence-based practice: Implications for accelerating the integration of evidence-based practice into graduate programs. *Journal of Professional Nursing, 24*(1), 7–13.

National Association of Clinical Nurse Specialists (NACNS). (2009). Core practice doctorate clinical nurse specialist (CNS) competencies. Retrieved August 29, 2011, from http://www.nacns.org/docs/CorePracticeDoctorate.pdf

National Organization of Nurse Practitioner Faculties (NONPF). (2006). Practice doctorate nurse practitioner entry-level competencies. Retrieved September 13, 2011 from http://www.nonpf.com/associations/10789/files/DNP%20NP%20competenciesApril2006.pdf

Nightingale, F. (1859). *Notes on nursing: What it is and what it is not.* London: Harrison and Sons.

Peck, A. (2005). Changing the face of standard nursing practice through telehealth and telenursing. *Nursing Administration, 29*(4), 339–343.

Pravikoff, D., Pierce, S., Tanner, A., Bakken, S., Feetham, S., Foster, R., et al. (2005). Evidence-based practice readiness study supported by academy nursing informatics expert panel. *Nursing Outlook, 53*(1), 49–50.

Robert Wood Johnson Executive Nurse Fellows Program. (2009). Retrieved September 13, 2011 from http://www.executivenursefellows.org

Rossen, K., Bartlett, R., & Herrick, C. (2008). Interdisciplinary collaboration: The need to revisit. *Issues in Mental Health Nursing, 29*(4), 387–396.

Schmalenberg, C., Kramer, M., King, C., Krugman, M., Lund, C., Poduska, D., et al. (2005). Excellence through evidence: Securing collegial/collaboration nurse–physician relationships, part 1. *Journal of Nursing Administration, 35*(10), 450–458.

Sharp, N. (1998). From "incident to" to telehealth: New federal rules and regulations affect NPs. *Nurse Practitioner, 23*(8), 68–69.

Sheriff, K., Wallis, M., & Chaboyer, W. (2007). Nurses' attitudes to and perceptions of knowledge and skills regarding evidence-based practice. *International Journal of Nursing Practice, 13*(6), 363–369.

Shneyder, Y. (2002). Personal digital assistants (PDAs) for the nurse practitioner. *Journal of Pediatric Health Care, 16*(6), 317–320.

Sigma Theta Tau International Evidence-Based Practice Task Force. (2004). Evidence-based nursing: Rationale and resources. *Worldviews on Evidence-Based Nursing, 1*(1), 69–75.

Simpson, R. (2004). The softer side of technology: How IT helps nursing care. *Nursing Administration Quarterly, 28*(4), 302–305.

Simpson, R. (2005). From tele-ed to telehealth: The need for IT ubiquity in nursing. *Nursing Administration Quarterly, 29*(4), 344–348.

Stein-Parbury, J., & Liaschenko, J. (2007). Understanding collaboration between nurses and physicians as knowledge at work. *American Journal of Critical Care, 16*(5), 470–477.

Styles, M., & Lewis, C. (2000). Conceptualizations of advanced nursing practice. In A. Hamric, J. Spross, & C. Hanson (Eds.), *Advanced nursing practice: An integrative approach* (pp. 33–51). Philadelphia: W. B. Saunders.

Webster's concise English dictionary. (2004). New Lenark, Scotland: David Dale House.

Yeager, S. (2005). Interdisciplinary collaboration: The heart and soul of health care. *Critical Care Nursing Clinics of North America, 17*(2), 143–148.

Zytkowski, M. (2003). Nursing informatics: The key to unlocking contemporary nursing practice. *AACN Clinical Issues, 14*(3), 271–281.