

SECTION 2

The Health Labor Force: Understanding the Distribution of Power and Influence

Nurses: Leading Change to Improve Health and Health Care

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Overview

Nurses comprise the largest segment of the healthcare workforce in the United States, and they are the professionals who spend the most time providing direct care to patients. They play an essential role in helping to advance the nation's health. "Registered Nurses represent the largest profession within the U.S. health workforce, with over 2.7 million RNs employed in 2010 (U.S. Bureau of Labor Statistics [BLS], 2012). The BLS forecasts demand for RNs will result in 3.5 million nursing jobs by 2020, marking a 26% increase over 10 years" (Spetz, 2014). Nurses are indispensable to a patient's overall quality of health, safety, and satisfaction with care delivery. They are well positioned to improve health and health care, and to influence policy. This ability to drive health policy emerges from the recommendation of the Institute of Medicine's report titled *The Future of Nursing: Leading Change, Advancing Health* (2010) to promote nurses for appointments to governing boards, commissions, task forces, and other policy-related entities.

As hospitals begin to submit new data to the Centers for Medicare and Medicaid Services on patient satisfaction, nursing will be one of the most important factors in how patients rate their hospital experiences and whether they would recommend their hospital to a family member or friend (Centers for Medicare and Medicaid Services, 2006). In fact, several studies have demonstrated a relationship between patient satisfaction and nurse staffing levels, a higher proportion of registered nurse (RN) skill mix, RN-physician collaboration, and nurses' work environments (Bolton et al., 2003; Cramer, 2014; Daley, 2014; Larrabee et al., 2004; McGillis Hall et al., 2003; Roberts, 2014; Seago, Williamson, & Atwood, 2006; Sovie & Jawad, 2001; Tervo-Heikkinen, Kvist, Partanen, Vehviläinen-Julkunen, & Aalto, 2008; Tervo-Heikkinen et al., 2009; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004). Today's healthcare environment is exceedingly complex and

requires that nurses be exceptionally prepared to provide quality health care and that they support healthcare reform.

The Institute for Healthcare Improvement (IHI) has developed a framework that describes an approach to optimizing health system performance (2014). IHI says new designs must be developed to simultaneously pursue three dimensions, which they call the Triple Aim:

- Improving the patient experience of care (including quality and satisfaction)
- Improving the health of populations
- Reducing the per capita cost of health care

It is important that nurses focus on excellent patient care outcomes and identify nursing practices that align with the Triple Aim. Policy makers and healthcare stakeholders must be informed about the education–quality relationship of nurses and how the nursing profession adds value to the overall healthcare delivery system. This chapter will focus on ways in which nurses lead change to improve health and health care that drive economic and social policies that effectively promote the health of populations.

Objectives

- Explain the critical role nurses play in leading change to improve health and health care.
- Inform nurses about how healthcare reform will achieve the Triple Aim of better care for individuals, better health for populations, and lower per capita costs.
- Identify the challenges and opportunities for addressing the nation’s shortage of nurses and nurse faculty.
- Describe various approaches and solutions to the nursing shortage.

Origins of the Nursing Profession

From its beginning, nursing was defined 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” (Nightingale, 1860, p. 126). This early definition of nursing was written by Florence Nightingale and included many of the concepts still considered important today; this was remarkable considering how undeveloped

professional nursing was in the mid- to late-1800s. Nightingale was strategic in her thinking about the importance of the observational skills of nurses and the impact of the environment on health. She clearly recognized health promotion and health maintenance as important responsibilities of nursing.

Until the late 19th century, nursing was seen as common employment for women, and nurses were viewed as second-class citizens with ill morals and poor character. To overcome the negative societal views of nursing

and to improve the qualities of potential nurse recruits, efforts were made to establish proper preparation for nurses. A physician, Ann Preston, organized in 1861 the first training program for nurses in the United States at Philadelphia's Woman's Hospital. This training program was open to women "who wished greater proficiency in their domestic responsibilities" (Stevens, 1989, p. 17).

The choice to use hospitals as the site for training nurses expanded rapidly in the late 1800s as hundreds of new hospitals built under the aegis of religious orders, ethnic group industrialists, and elite groups of civic-minded individuals who looked for efficient ways to staff their wards. Because student nurses were a constantly renewable source of low-cost workers to staff the wards, even some of the smallest hospitals maintained nursing schools (Stevens, 1989). Hospital nursing school programs, therefore, were primarily sequences of on-the-job training rather than academic courses.

World War I had a profound affect on the nursing profession. Before the war, nursing was divided into three domains: public health, private duty, and hospital. Public health nursing was an elite pursuit and was recognized as instrumental in the campaign against infectious diseases, such as tuberculosis, and in promoting population health, such as infant welfare. By 1920 more than 70% of nurses worked in private duty; about half of those worked in patients' homes and half worked for private patients in hospitals. Hospital nurses were primarily those in training. The war emphasized the drama and effectiveness of hospitals, and it soon codified hospitals as the center of nursing education in the increasingly specialized acute care medical environment. The war experience established nurses as dedicated associates in hospital science. Nursing

leaders promoted the idea of upgrading nursing through high-quality hospital nursing schools, preferably associated with universities. The choice to idealize the role of nurses as dedicated and deferential to physician specialists in the hospital marginalized the independent role of nurses in social medicine and public health. The social medicine and public health aspects of nursing were subjugated to the image of nursing as a symbol of patriotism, national sacrifice, and efficiency.



Courtesy of the National Library of Medicine

As World War II brought increased specialization to the field of nursing and ultimately funding for the educational preparation of nurses, they began to specialize during the 1950s. Because of the short supply of nurses after World War II, hospitals began to group the least physiologically stable patients in one nursing unit for intensive care, where the more competent nurses cared for the sickest patients. This arrangement did not lower the need for nurses but instead created the need for a critical care nurse specialty as the need for staff nurses continued to grow. To increase manpower, Congress passed the Nurse Training Act of 1964 and the Health Manpower Act

of 1968. The Nurse Training Act of 1971 added substantially to the federal support of nursing education (Lamm, 1996). Nevertheless, state funding provided the largest support for nursing schools, 80% of which are in colleges and universities.

Nursing Definitions: Past and Present

The definitions of nursing in the early 20th century focused on nursing functions and were holistic. Virginia Henderson wrote one of the most widely accepted definitions of nursing in this era: “Nursing may be defined as that service to an individual that helps him to attain or maintain a healthy state of mind or body” (Harmer & Henderson, 1939, p. 2). She later refined her definition into one that is perhaps best known in the world because of its adoption by the International Council of Nurses:

The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible. (Henderson, 1960, p. 3)

In 1952 Hildegard Peplau added an important dimension to the definition of nursing by expressing it in interpersonal terms. Peplau stated that “the goals of nursing are currently in transition; it’s major concerns fifty years ago had to do with getting sick people well; today, nursing is more concerned with ways for helping people to stay well” (1992, p. 6). Nursing

theory development during the 1950s and 1960s continued to refine the definition of nursing.

In the contemporary sphere of nursing, the current definition emerges from the 2003 edition of the American Nurses Association’s (ANA) Nursing’s Social Policy Statement:

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations. (American Nurses Association [ANA], 2010 p. 41)

This definition of nursing provides a framework for nursing practice and curriculum development, and it defines the boundaries, functions, and purpose of the profession. It includes the four essential characteristics of nursing: human responses or phenomena, theory application, nursing actions or interventions, and outcomes (ANA, 2010.) A clear understanding of the boundaries of nursing is needed as more allied health professions and unlicensed assistive personnel are added to the patient care arena. Policy makers need to understand the role of nursing to make the best decisions on healthcare policy. With this goal in mind, nurses must work with key policy makers to promote crucial conversations about economic and social policies that can cost-effectively promote the health of communities. The profession is well positioned to play a leadership role in helping the government address the \$2.7 trillion dollars spent on health care annually (Hartman, Martin, Benson, Catlin, & National Health Expenditure Accounts Team, 2013).

Nursing Regulation

Nursing regulation is provided by government oversight through administrative and legislative bodies within each state. Nursing as a health profession must be regulated because it may pose risk of harm to the public if it is practiced by someone who is unprepared and incompetent. As a rule, the public may not have sufficient information and experience to identify an unqualified healthcare provider and is vulnerable to unsafe and incompetent practitioners; therefore, to protect the public's health and interest, each state establishes its own board of nursing, which is responsible for the regulation of nursing practice, including the scope of practice. Boards of nursing are authorized to enforce the Nurse Practice Act (NPA) and develop administrative rules, regulations, and other responsibilities in accordance with the act. The definition in the NPA acts as the legal definition of nursing in that state. The legislatures of all states and territories have enacted an NPA. The NPA itself is insufficient to provide the necessary guidance for the nursing profession; therefore, each NPA establishes a board of nursing that has the authority to develop administrative rules or regulations to clarify the law or make it more specific. Rules and regulations must be consistent with the NPA and cannot go beyond it. These rules and regulations undergo a process of public review before enactment. After they are enacted, rules and regulations have the full force and effect of law (National Council of State Boards of Nursing, 2014a).

The specific details of the NPA differ among states; however, they all must include the following (National Council of State Boards of Nursing, 2014b):

- Authority, power, and composition of a board of nursing

- Education program standards
- Standards and scope of nursing practice
- Types of titles and licenses
- Requirements for licensure
- Grounds for disciplinary action, other violations, and possible remedies

Every nurse must be informed and educated about the practice of nursing in their state. It is a right granted by a state to protect those who need and require nursing care. The guidelines of the NPA and its rules provide safe parameters within which to work, and it protects patients from unprofessional and unsafe nursing practice. The act is a dynamic document that evolves and is updated or amended as changes in scope of practice occur.

Licensure

State boards of nursing regulate nursing practice, including the scope of nursing practice. In each state the model NPA describes the scope of practice for RNs, licensed practical/vocational nurses, and advanced practice nurses (APRNs). Licensure is one type of regulation. It is the process by which boards of nursing grant permission to an individual to engage in nursing practice after determining that the applicant has attained the competency necessary to perform a unique scope of practice safely (National Council of State Boards of Nursing, 2011). Licensure is necessary when the regulated activities are complex; it requires specialized knowledge and skills, as well as independent decision making. The National Council of State Boards of Nursing includes the following in the intent of licensure:

- A specified scope of practice may be performed legally only by licensed individuals.

- Title protection is granted to those individuals who meet the legal and educational standards of the profession. Licensed individuals adhere to professional codes of conduct.
- The authority to take disciplinary action is granted to protect the public if the licensee violate the laws or rules.

"The mission of the National Council of State Boards of Nursing is to provide education, service, and research through collaborative leadership to promote evidence-based regulatory excellence for patient safety and public protection." (National Council of State Boards of Nursing, 2010).

Certification

Certification is another type of credential that affords title protection and recognition of accomplishment, but it does not include a legal scope of practice. The federal government has used the term *certification* to define the credentialing process by which a nongovernmental agency or association recognizes individuals who have met specified requirements. Many state boards of nursing use professional certification as one requirement toward granting authority for an individual who obtained advanced or specialized training in an area of practice, as with RNs.

Although specialty certification was found to be associated with better patient outcomes, such outcomes were associated only when care was provided by baccalaureate-educated nurses (Kendall-Gallagher, Aiken, Sloane, & Cimiotti, 2011). The authors concluded that no effect of specialization was seen in the absence of baccalaureate education.

Some state government agencies have also used the term *certification* for governmental credentialing. Confusion may occur because

regulatory agencies and professional membership associations may use the same term in a different context. Certification is the regulating process under which a state or voluntary professional organization, such as a national board, attests to the educational achievements and performance abilities of persons in a healthcare field of practice. This certification provides practitioners with an additional sense of personal and professional accomplishment beyond an academic degree and licensure.

Certification is a much less restrictive regulation than licensing. It allows the public, employers, and third-party payers to determine which practitioners are appropriately qualified in their specialty or occupation. It generally has no provision for regulating impaired or misbehaving practitioners other than putting them on probation or dropping their certification. Unlike licensure, certification has no legal basis for preventing an impaired or professionally delinquent individual from practicing (National Council of State Boards of Nursing, 2011).

Nursing's Professional Status

Recognition

From the very beginning, the nursing profession struggled with the challenge of being recognized as a valuable contributor to health care in settings such as hospitals, nursing homes, schools, health departments, and industry. In part, much of this lack of recognition was because nursing was, and still is, a female profession, with only 9.1% of the workforce represented by men (Health Resources and Services Administration, 2013). While the increases in enrollment are a positive indicator, the representation of men in nursing education programs remains low. Current estimates

show that men are approximately 9–11% of the nursing workforce (National Advisory Council on Nurse Education and Practice [NACNEP], 2013). Men accounted for 8.8% of all baccalaureate degree graduates, 10.6% of master's degree graduates, and 4% of doctoral program graduates in the fall of 2004 (NACNEP, 2008).

As a female-dominated profession, society views caring by nurses as natural to their gender role and not within the scope of a professional role that requires education and licensure, like law and medicine. This is evidenced in the education of nurses. During the latter part of the 19th century, much of nursing education and preparation was hospital-based apprenticeships. Nurses learned by doing and were dominated by hospital administrators and the medical profession, who were university trained. Nurses were expected to carry out the orders of physicians. With this subservient position, along with the increasing demands of hospitals, nurses quickly became discouraged and turned to collective bargaining and union representation for expanded access to decision making, higher wages, and improved job security.

With hospital training programs now accounting for less than 5% of new graduates, nurses have been able to professionalize their educational preparation (Aiken, Cheung, & Olds, 2009). From hospital training in the early 19th century to university-based schools of nursing in the beginning of the 20th century to the present and the emergence of associate's degree programs of the mid-20th century, nursing has slowly begun to lift the quality and quantity of the workforce. In October 2010 the Institute of Medicine released its landmark report, *The Future of Nursing*, initiated by the Robert Wood Johnson Foundation, which called for increasing the number of baccalaureate-prepared nurses in

the workforce to 80% and doubling the population of nurses with doctoral degrees (Institute of Medicine [IOM], 2010).

Leading Change to Advance the Nation's Health

Nurses are essential to the healthcare system, serving on the front lines at the bedside and in the board room. The U. S. Bureau of Labor Statics forecasts that demand for RNs will result in 3.5 million nursing jobs by 2020, suggesting a marked increase of 26% from 2010 levels. This will shift RN employment away from acute care to the outpatient or ambulatory care setting, particularly to physicians' offices and home care services. Additionally, the Affordable Care Act (ACA) will impact where RNs will work and the skills that will be needed within those settings. For example, nurses will be expected to focus on roles that include care coordination, case management, patient educators, and chronic care specialists (Spetz, 2014).

The demand for RNs will continue to grow at a higher rate, driven largely by population growth, due to the increased number of older adults who require more healthcare services. To meet this demand nurses must demonstrate leadership by becoming more effective in political advocacy to advance nursing and nurse workforce issues to the national health agenda. Only by active participation will the professional status and recognition of nursing improve. Nurses at all levels of practice must articulate in a clear and succinct way the reasons that nursing matters to the overall health and well-being of the nation. As *The Future of Nursing* suggests, nurses should be full partners with other healthcare professionals in redesigning health care in the United States (IOM, 2010).

Recommendation 7: Prepare and enable nurses to lead change to advance health. Nurses, nursing education programs, and nursing associations should prepare the nursing workforce to assume leadership positions across all levels, while public, private, and governmental health care decision makers should ensure that leadership positions are available to and filled by nurses. (IOM, 2010, p. 5)

Having strong leadership skills and competency to lead change will empower nurses at all levels; however, full recognition of nursing as a profession requires nurses themselves to take initiatives to negotiate that kind of dramatic shift to break the perceptions of physicians and other healthcare administrators. To claim leadership, nurses have strategized about the need to extend their education from the lowest level allowed for licensure to a higher level, such as a master's or doctorate degree. It is argued that the highest level of education will gradually raise the image of nursing as a profession and better prepare nurses in this highly complex and evolving healthcare environment. With a higher education, nurses increase their capacity beyond direct patient care to other roles that qualify them to teach and to conduct healthcare services and related research.

Expanding nursing's influence through the academy and in research provides influence and leadership by giving the nursing profession a voice to exercise knowledge in patient care and public health issues. Nursing research contributes to the discipline of nursing science and improves the nation's health. For example, research funded by the National Institute of Nursing Research (NINR) provides new opportunities to integrate physical, social, and behavioral sciences and design new technology and

tools that add new knowledge of care across the life span. This knowledge is essential to the present and future health of the nation.

Additionally, nursing research seeks to address care management of patients during illness and recovery, reduce risks for disease and disability, promote healthy lifestyles, enhance the quality of life for those with chronic illness, and promote care for individuals at the end of life. It is through funding from NINR that nursing research helps to advance nursing practice, improve patient care, eliminate health disparities, and attract new students to the profession. It is important to note that for nearly 30 years, NINR has been part of the future of the nation's healthcare system by providing grants, research training, and interdisciplinary practice and education.

Physically Challenging

Nursing is a physically challenging occupation that has impacted nurse morale and nurse retention. Since the mid-1980s, minimizing inpatient hospital stays has been increasingly emphasized with a commitment to reduce hospital lengths of stay and support continued hospital downsizing; however, because hospitals now treat much sicker patients than before, more nurses are needed per unit, and their work has become more intensive. In fact, the current shortage has burdened the nurse workforce with extended work hours and shifts and has exacerbated occupational injuries and related disabilities. Nelson and Baptiste (2004) identified that patient handling and movement tasks are physically demanding, performed under unfavorable conditions, and often unpredictable in nature. Caring for today's patients, regardless of setting, offers multiple challenges, including variations in size, physical disabilities, cognitive

function, level of cooperation, and fluctuations in condition, all of which causes greater risk for nursing personnel.

It is estimated that each year 12% of nursing personnel will consider a job transfer to decrease risk, and another 12–18% will leave the nursing profession because of chronic back pain (Moses, 1992; Ovayolu, 2014; Owen, 1989). The cost of work-related musculoskeletal disorders in nursing is quite expensive and includes indirect costs associated with temporary hires for replacement personnel, overtime to absorb the duties of an injured worker, legal fees, production losses for time spent on claim processing and witnessing, decreased output after a traumatic event, and training for temporary or replacement personnel (Charney, Zimmerman, & Walara, 1991; Ovayolu, 2014; U.S. Department of Labor, Occupational Safety and Health Administration, 2009). The physical difficulty of high-risk patient handling tasks varies by clinical setting. It is critical to understand the specific high-risk tasks in each setting because solutions must be specifically applied to address each high-risk task. Nurses must gain additional and extended education in evidence-based solutions for high-risk patient handling tasks in complex medical and patient care settings. Various types of interventions are being implemented in an attempt to reduce high-risk patient handling tasks. An ergonomic approach has been used, with supporting evidence for solutions that have proven effective. In 2004 the ANA developed a program called Handle with Care that supports safe practices for patient handling. The ANA recently issued a position statement supporting actions and policies that result in the elimination of manual patient lifting to promote a safe environment of care for nurses and patients (ANA, 2014). The ANA is advocating in support of Safe Patient Handling & Mobility (H. R. 2480).

The bill is designed to decrease the potential for injury to all who provide and receive care while reducing work-related healthcare costs and improving the safety of patient care delivery. Nurses are encouraging the secretary of labor to issue an occupational safety and health standard to reduce injuries to patients and nurses by establishing a prevention standard.

All nurses must be informed and educated about the use of patient handling equipment, with proper body mechanics emphasized, including evidence-based solutions such as the use of patient handling equipment and devices, patient care ergonomic assessment protocols, no-lift policies, and patient lift teams. There are remarkable growth opportunities, and burdens, for nursing employment. The challenge is to promote a safe environment of care for nurses and patients that reduces the risk and physical demands on nurses, ensuring greater coordination and continuity of care.

Pathways to Nursing as a Career Choice

As health care needs grow more complex, the career pathway of nursing has evolved into the following career choices: RNs, APRNs, clinical nurse specialists, and clinical nurse leaders. Each of these professional roles requires unique educational preparation and training.

Registered Professional Nurses

RNs are typically prepared for professional practice through different levels of nursing education. To achieve the RN title, an individual must graduate from a state-approved school of nursing—either a 4-year university program or a 2-year associate’s degree program—and pass a state RN licensing examination called

the National Council Licensure Examination (NCLEX) for Registered Nurses. The 4-year university-based bachelor of science in nursing (BSN) degree provides the nursing theory, sciences, humanities, and behavioral science preparation necessary for the full scope of professional nursing responsibilities. It also provides the knowledge base necessary for advanced education in specialized clinical practice, research, or primary health care. A 2-year program granting an associate's degree in nursing (ADN) prepares individuals for a defined technical scope of practice. Set in the framework of general education, the clinical and classroom components prepare ADN graduates for nursing roles that require nursing theory and technical proficiency. Many RNs whose first degree is an ADN return to school during their working life to earn a bachelor's degree or higher.



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Advanced Practice Registered Nurses

APRNs have expanded in numbers, and their responsibilities and capabilities have developed over the past several decades. Currently, there is no uniform model of regulation of APRNs across the states. Each state independently determines the APRN legal scope of practice, the roles that are recognized, the criteria for entry into advanced practice, and the

certification examinations accepted for entry-level competence assessment. Many licensing exams—such as those for RNs, clinical nurse specialists (CNSs), and clinical nurse leaders (CNLs)—offer a license title without distinguishing between those who graduated from a diploma program and those who graduated from a BSN, master's, or doctorate program.

APRNs are highly valued and are an integral part of the healthcare system. They include certified nurse practitioners (NPs), certified nurse–midwives (CNMs), CNSs, and certified registered nurse anesthetists (CRNAs). Each APRN has a unique history and context. The title distinguishes one's academic achievement and the profession level of one's practice. Although education, accreditation, and certification are necessary components of an overall approach to preparing an APRN for practice, the licensing boards governed by state regulations and statutes are responsible for setting practice within a given state.

The types of APRNs include the following:

- Nurse practitioners deliver front-line primary and acute care in community clinics, schools, hospitals, and other settings, and they perform such services as diagnosing and treating common acute illnesses and injuries; providing immunizations; conducting physical exams; and managing high blood pressure, diabetes, and other chronic problems.
- Certified nurse–midwives provide prenatal and gynecological care to normal healthy women; deliver babies in hospitals, private homes, and birthing centers; and continue with follow-up postpartum care.
- Clinical nurse specialists provide care in a range of specialty areas, such as cardiac, oncology, neonatal, pediatric, and obstetric/gynecologic nursing.

Table 5-1 Medicare Approved Charges

| | 2011 | 2012 | Percentage increase |
|----------------------|-------------------|-------------------|---------------------|
| APRNs total | \$2,412,898,300 | \$2,718,521,734 | 12.7 |
| NPs | \$1,452,958,877 | \$1,677,842,316 | 15.5 |
| CRNAs | \$899,995,592 | \$978,973,321 | 8.8 |
| CNSs | \$56,838,086 | \$58,189,376 | 2.4 |
| CNMs | \$3,105,746 | \$3,516,721 | 13.2 |
| All Part B providers | \$126,576,996,112 | \$128,081,437,867 | 1.2 |

Source: Data from McMenamin (2014).

- Certified registered nurse anesthetists administer more than 65% of all anesthetics given to patients each year and are the sole providers of anesthesia in approximately one-third of U.S. hospitals.

The use of APRNs in healthcare settings is increasing. Peter McMenamin, senior policy fellow—ANA health economist at the ANA, reported on the *One Strong Voice* blog that national data reveal the utilization statistics of APRNs enrolled as Medicare Part B providers for 2012 (table 5-1).

In the aggregate the Medicare-approved charges for all Part B providers increased by 1.2% from 2011 to 2012. NPs showed the largest increase at 15.5%. CNMs experienced an increase of 13.2%, also above the APRN average (McMenamin, 2014).

All four APRN roles increased their Medicare persons served statistics by more than proportionate amounts. In 2012 APRNs (billing under their own Nurse Practitioner Identification number) provided one or more services to 11.4 million fee-for-service Medicare Part B beneficiaries, just more than 1 million additional patients compared to 2011. This was an increase in persons served of 9.7%. NPs led the pace with

a 12.4% increase in persons served, or 718,660 additional patients (McMenamin, 2014).

The number of persons eligible for Medicare increased by 2 million in 2012, resulting in an increase of 3.3% in the Part B population, compared to increases of 2.5% experienced in the 3 preceding years.

Specialization and the Evolution of Nursing Roles

The increasing specialization of nurses is demonstrated in the evolving role of CNSs and CNLs. Just as the role of NPs evolved over several decades to meet demands for increased access to primary health care, the role of the CNS was developed in response to the specialized nursing care needs of increasingly complex medical need. Like a physician specialist, CNSs are advanced practice specialists with in-depth knowledge and skills that make them valuable adjunct practitioners in specialized clinical settings. In today's healthcare system, nurses are critical caregivers who have a profound effect on the lives of patients and their families. They play an essential role in the quality of care patients receive; CNSs play a unique role in the

delivery of high-quality nursing care. In addition to direct patient care, CNSs also engage in teaching, mentoring, consulting, research, management, and systems improvement. Able to adapt their practice across settings, these clinicians greatly influence outcomes by providing expert consultation to all care providers and by implementing improvements in healthcare delivery systems. Furthermore, the growing body of research on CNS outcomes shows a strong correlation between CNS interventions and safe, cost-effective patient care. CNS practice has been directly linked to reducing hospital costs and lengths of stay, reduced frequency of emergency room visits, improved pain management practices, increased patient satisfaction with nursing care, and fewer complications in hospitalized patients (Fulton & Baldwin, 2004; National Association of Clinical Nurse Specialists, 2013). Unfortunately, the constraining forces of today's practice environment of mounting financial pressure, limited nursing resources, and changing technology, along with greater patient acuity and shorter lengths of stay, have tested the very core of the profession's values and contributions to quality care.

A CNL is a master's-prepared generalist who puts evidence-based practice into action and serves as a central liaison between the patient and all other healthcare providers. CNSs play an important role in the provision of nursing care that does not duplicate the emerging role of the CNL. In terms of focus, CNLs are educated as generalists, whereas CNSs are prepared for specialty practice. To understand the role of CNLs, it is important to differentiate the duties of CNLs and CNSs. A CNL coordinates and implements client care, whereas a CNS designs and evaluates patient-specific and population-based programs. A CNL evaluates and implements evidence-based practice,

whereas a CNS has the added responsibility of generating new evidence. The CNS and CNL roles are distinct and complementary (Spross et al., 2004). The American Association of Colleges of Nursing (AACN) envisions that these clinicians will work collaboratively to ensure that patients receive the best possible care. Nurses are needed both at the point of care and in advanced practice roles to deliver care that is growing intensely more complicated.

Current State of the Profession

Demand

In 2006 there were 2.4 million nurses in the workforce, comprising the largest segment of professionals (28%) working in the healthcare industry (Mee, 2006; U.S. Bureau of Labor Statistics, 2007). According to the U.S. Bureau of Labor Statistics Monthly Labor Report for January 2012, RNs are projected to add the largest number of new jobs (more than 711,900) to the healthcare practitioners and technical occupations group from 2010 to 2020. Healthcare and technical occupations are projected to add 2.0 million new jobs from 2010 to 2020, the second most of any major group. This follows an increase of 601,700 jobs from 2006 to 2010, more growth than any other occupational group" (Lockard & Wolf, 2012).

Despite job growth, Buerhaus, Potter, Staiger, and Auerbach (2008) project a shortage of 500,000 nurses by 2020. As health care continues to shift from acute care hospitals to more community-based primary care and other outpatient sites, and because of the rising complexity of acute care, the demand for RNs in hospitals will continue to climb by 36% by 2020 (NACNEP, 1996). Nurses as front-line caregivers provide ongoing vigilance to reduce bad things from happening to patients, such as medication errors,

patient falls, and pressure ulcers. The shortage of RNs, in combination with an increased workload, poses a threat to quality of care.

The long-term supply of RNs relies on the student pool that is currently enrolled or interested in nursing education programs. Economic factors, such as tuition requirements and financial aid availability, duration of the academic program, wages of the markets upon graduation, and the number of nursing education programs, will also influence an individual's decision to become a nurse.

At all [educational] levels, professional-level nursing programs reported increases in the number of students from minority backgrounds over the past year. While the percentage of students from underrepresented backgrounds in entry-level baccalaureate nursing programs increased to 28.1%, the proportion of minority students in master's programs increased to 29.3%, in research-focused doctoral programs to 27.7%, and in practice focused doctoral programs to 24.3%. (American Association of Colleges of Nursing [AACN], 2013)

The AACN survey data from 2012 to 2013 shows that enrollment in entry-level baccalaureate nursing programs increased by 2.2%. The organization's fall 2013 annual survey reveals that enrollment in all types of professional registered nursing programs increased from 2012 to 2013, including increases in baccalaureate (2.2%), RN to baccalaureate (15.2%), master's (6.7%), PhD (1.3%), and doctor of nursing practice (DNP) (27.4%). This is not adequate to meet the demand. The problem is not found with the number of persons interested in pursuing a nursing career. According to new survey data released by the AACN, less than half of all qualified applicants to

entry-level baccalaureate nursing programs were admitted and enrolled last year despite calls to increase the number of well-educated RNs in the U.S. workforce. However, the shortage of faculty, insufficient clinical education sites, and budget cuts continue to act as barriers to future growth in undergraduate education (AACN, 2014).

"According to a 2013 survey conducted by the National Council of State Boards of Nursing and The Forum of State Nursing Workforce Centers, 55% of the RN workforce is age 50 or older" (AACN, 2014). According to Berlin and Sechrist (2002), the average age of nurse faculty at retirement is 62.5 years.

Although the percentage of people entering a university program for graduate-level education that have a BSN degree is rising, nurses with graduate education will likely not choose a faculty position that combines teaching and research. Most clinical care and administration roles offer a higher and more competitive salary than academic positions while still affording opportunities to teach and carry out research.

The AACN survey found that total enrollment in all nursing programs leading to the baccalaureate degree is 276,946, an increase from 259,100 in 2011. Within this population, 174,644 students are enrolled in entry-level baccalaureate nursing programs. In graduate programs, 101,616 students are enrolled in master's programs, 5,110 are enrolled in research-focused doctoral programs, and 11,575 are enrolled in practice-focused doctoral programs in nursing. (AACN, 2013)

DNP programs account for the largest share of growth in this student population, with a 40.9% increase in enrollments reported this year (85 schools reporting). In 2009, the number

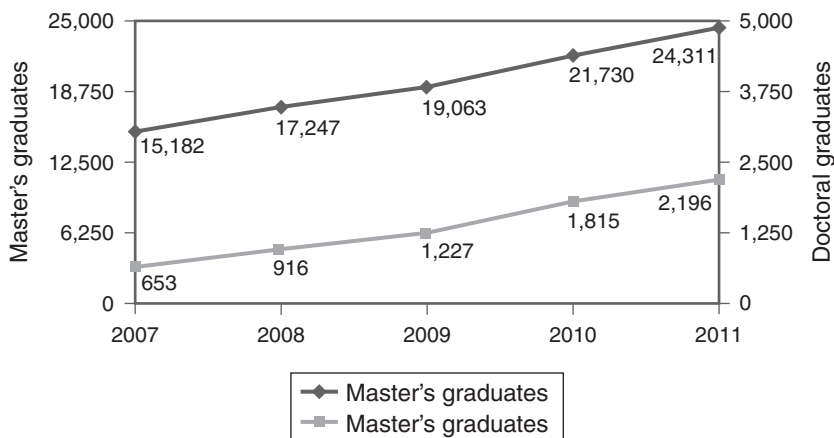
of students enrolled in research-focused doctoral programs (i.e., PhD or DNSc) increased by 4.1%, according to preliminary estimates. See Figure 5-1 for the numbers of master's and doctoral graduates from 2007 to 2011.

A second factor is wages, which are a way to attract nurses to the field and retain them after they are in practice. RNs are among the highest-paying occupations; registered nursing continues as the top occupation in terms of the largest job growth from 2006 to 2016 (Dohm & Shniper, 2007). This job projection growth suggests that more than 587,000 new jobs will be created through 2016. Nearly 57% of RNs worked in general and medical and surgical hospitals, where RN salaries averaged \$60,970 per year. The increase in nurses' wages over the past 30 years accounts for the increase in persons who are interested in applying to baccalaureate nursing programs.

Solutions to the Nursing Shortage

Solutions to the nurse shortage crisis focus on recruiting and training more students to choose nursing as a career, but they neglect to raise the education level of the current nursing workforce or promote the teaching faculty position. In academic institutions, raising faculty salaries and using new teaching models, such as distance learning and simulation, are common strategies to attract more faculty members or use fewer faculty in existing programs. Nonetheless, the true solution may rely on education policy to realign the workforce educational composition to the real demand of nursing with graduate-level education:

- Expand programs
- Implement accelerated programs
- Provide funding support



Data Source: HRSA compilation of data from the AACN Research and Data Center, 2012

FIGURE 5-1 Masters and Doctoral Graduates 2007-2011

Reproduced from Health Resources and Services Administration (HRSA). Bureau of Health Professions. National Center for Health Workforce Analysis. (2013). *The U.S. Nursing Workforce: Trends in Supply and Education*. Retrieved from <http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/nursingworkforce/nursing-workforcefullreport.pdf>

Policy as a Tool to Influence Nursing Professionalism and Nursing

Healthcare policy, whether it is created through governmental actions, institutional decision making, or organizational standards, creates a framework that can facilitate or impede the delivery of healthcare services. Thus, engagement in the process of policy development is central to creating a healthcare system that meets the needs of its constituents. Political activism and a commitment to policy development are central elements of professional nursing practice; therefore, the nursing profession and master's and doctoral graduates must assume a broad leadership role on behalf of the public and the profession (Ehrenreich, 2002). Health policy influences multiple care delivery issues, including health disparities, cultural sensitivity, ethics, the internationalization of healthcare concerns, access to care, quality of care, healthcare financing, and issues of equity and social justice in the delivery of health care. Nurses must stand ready to design, implement, and advocate for healthcare policy that addresses issues of social justice and equity in health care. Nurses can become potent influencers in policy formation. They have the capacity to analyze the policy process and the ability to engage in politically competent action. This capacity includes the ability to engage proactively in the development and implementation of health policy at all levels, including institutional, local, state, regional, federal, and international levels. Professional nurses must be seen as leaders in the practice arena and provide a critical interface among practice, research, and policy.

Preparing nurses with the essential competencies to assume a leadership role in the development of health policy requires opportunities

to contrast the major contextual factors and policy triggers that influence health policy making at various levels. For example, nurses can take the following actions:

- Critically analyze health policy proposals, health policies, and related issues from the perspective of consumers, the nursing profession, other health professions, and other stakeholders in policy and public forums.
- Demonstrate leadership in the development and implementation of institutional, local, state, federal, or international health policy.
- Influence policy makers through active participation on committees, boards, or task forces at the institutional, local, state, regional, national, or international levels to improve healthcare delivery and outcomes.
- Educate others, including policy makers at all levels, regarding nursing, health policy, and patient care outcomes.
- Advocate for the nursing profession within the policy and healthcare communities.
- Develop, evaluate, and provide leadership for healthcare policy that shapes healthcare financing, regulation, and delivery.
- Advocate for social justice, equity, and ethical policies within all healthcare arenas.

The goal is to create a healthcare delivery system that ensures high-quality care at the exact time when the patient needs it. Nurses are creating model programs in acute care, primary care, and public health settings that are improving the health status of individuals while reducing costs (Hassmiller, 2009). These programs promote the goals that policy makers seek for health reform, including expanding access, improving quality and safety, and reducing costs (Robert Wood Johnson Foundation, 2009). They address problems related to both the supply and demand for nursing

services that may be solved with educational, professional, and institutional remedies.

Educational Remedies (Increase Number of Schools and Accelerated Programs)

To meet the more complex demands of today's healthcare environment, academic nurse leaders across all schools of nursing are working together to increase the proportion of nurses with a baccalaureate degree from 50–80% by 2020. These leaders are beginning to partner with education accrediting bodies, private and public funders, and employers to ensure funding, monitor progress, and increase the diversity of students to create a workforce prepared to meet the demands of diverse populations across the life span.



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Accelerated nursing programs continue to be an important pathway into nursing for individuals with degrees in other fields who are looking to change careers. Accelerated nursing programs are available in 46 states plus the District of Columbia and Puerto Rico. In 2012 there were 255 accelerated baccalaureate programs and 71 accelerated master's programs available at nursing schools nationwide. In addition, 25 new accelerated baccalaureate programs are in the planning stages, and 7 new accelerated master's programs are also taking shape (AACN, 2012). Accelerated baccalaureate programs offer the quickest route to licensure as an RN for adults who have already completed a bachelor's or graduate degree in a nonnursing discipline. Fast-track baccalaureate programs take between 11 and 18 months to complete, including prerequisites. Fast-track master's degree programs generally take about 3 years to complete. Graduates of accelerated programs are prized by nurse employers who value the many layers of skill and education these nurses bring to the workplace. Employers report that these graduates are more mature, possess strong clinical skills, and are quick studies on the job.

In 2004, 13% of the nation's RNs held either a master's or doctoral degree as their highest educational preparation. The current demand for master's- and doctoral-prepared nurses for advanced practice, clinical specialties, teaching, and research roles far outstrips the supply. The focus must remain on four key areas: establishing strategic partnerships and resource alignment, formulating policy and regulation, increasing faculty capacity and diversity, and redesigning educational curricula. Despite the increased interest in nursing programs, limited clinical placements for students and a dearth of nurse educators to teach

courses are making it difficult for many schools to expand enrollment in their programs. Increasing enrollment in baccalaureate nursing programs is a critical first step to correcting an imbalance in the nursing student population and reversing our nation's diminishing supply of nurse educators. In almost all jurisdictions, nursing faculty must possess a graduate degree to assume a full-time teaching role. Because the overwhelming majority of nurses with master's and doctoral degrees began their education in baccalaureate programs, efforts to alleviate the faculty shortage must focus on expanding enrollments in 4-year nursing programs.

Professional Remedies (Change Status of Nurses)

The role of nursing leadership is fundamental to overturning the misconception that nurses act as subordinates in providing patient care. This misconception is based on the traditional nurses' role of taking physicians' orders. This view of nursing has not been overturned completely in the public eye because of a lack of nursing leadership. Recruitment efforts focus mainly on the role of nurses in helping sick patients, assisting physicians, and bringing direct care to patients, but nothing is mentioned about the role of nursing as a leadership profession to improve our healthcare administration, develop healthcare policy, and influence medical practice. To change the general opinion of nursing, nurses must understand the multiple career choices they have and the meaning of their education.

Nursing is no longer a profession that merely follows physicians' orders; rather, it has nurses on the front line participating in initiatives to lead healthcare reform and suggest ways to improve access, cost, and quality. For example, advanced practice nurses have developed

initiatives around new infrastructure care models that focus on primary care, chronic care management, care coordination, and wellness. These include the Transition Care Model (TCM) designed by Mary Naylor, director of the Robert Wood Johnson Foundation Interdisciplinary Nursing Quality Research Initiative and professor at the University of Pennsylvania School of Nursing. Under this model, APRNs serve as primary care coordinators to help older patients avoid hospitalizations and promote longer-term positive health outcomes. The nurse meets with a hospitalized patient to coordinate service, evaluate medications, and establish a postdischarge plan of care that meets with the patient's and caregiver's goals. Within a day of being released from the hospital, the nurse visits the patient's home. The TCM focuses on continuity, evidence-based practice, coordination across the board, and improved outcomes. In this model, a transitional care nurse, who is an advanced practice nurse, is assigned to a patient upon admission into the hospital. This nurse immediately conducts an in-depth assessment of the patient's and the family's goals and initiates communication and collaboration with the patient's care providers, including the primary care physician. Additionally, this nurse visits the patient daily while he or she is admitted and develops an appropriate evidence-based transition care plan with the rest of the care team. Upon discharge the nurse and other members of the healthcare team will work with the patient to implement the care plan, reassess the patient, and collaborate with the patient's other caregivers. This model has been shown to increase patient satisfaction and improve patient physical function and quality of life (Naylor, Feldman, Keating, Koren, Kurtzman, Maccoby, Krakauer, Maccoby, & Krakauer, 2009).

Another example of expert care coordination and meeting the needs of special populations is that of Ruth Watson Lubic. She has founded certified birth centers, the Maternity Center Association in New York City, and the Family Health and Childbirthing Center in Washington, DC. These programs offer prenatal and labor and delivery care for women who have low-risk pregnancies. The care provided at these birth centers has demonstrated significant cost savings for childbearing women, reduced the Cesarean rate in 2005 compared with the rest of New York City (15% versus 28%), and significantly lowered the rates of premature and low birth weight babies, resulting in \$1.2 million in cost savings. If this nurse-driven innovation were converted to a nationwide model, the potential savings could be almost \$13 billion for Medicaid-funded deliveries.

Finally, the newest model of care on the healthcare landscape will be funded by the federal government. President Obama has pledged \$8.6 billion over 20 years for the Nurse–Family Partnership. This partnership pairs a nurse with a low-income, first-time mother. Over 2 decades the program has shown significantly better pregnancy outcomes, reductions in high-risk and subsequent pregnancies, fewer injuries among children, reduced child abuse, and fewer language delays among children. The program has generated a \$5.70 return for every dollar invested and a net benefit to society of \$17,000 to \$34,000 per family served (Lee, Aos, & Miller, 2008).

Institutional Remedies (Recruitment from Overseas)

Healthcare providers have sought their own solution to the shortage of nurses by recruiting nurses from abroad. The growth of foreign-born RNs averaged 6% per year, compared

with 1.5% of all RNs between 1994 and 2001. Nonetheless, the growth of foreign-born RNs doubled to 12.5% in 2002 (Buerhaus, Staiger, & Auerbach, 2009a). Overall, the growth of foreign-born RNs has accounted for more than one-third of the growth of total RN employment in the United States since 2002 (Buerhaus, Staiger, & Auerbach, 2003). After a temporary decline in 2005 because of the expiration of work visas, foreign-born nurse employment has increased again, surpassing growth in employment among nurses born in the United States (Huston, 2014).

The major factor that impacts the inflow of foreign-born or foreign-educated RNs is the availability of the employment-based visa. Because the recruitment of foreign nurses is usually conducted in less developed countries, the possibility of residing in the United States permanently with an income higher than they earn at home is very attractive.

Although some hospitals may find it faster to employ already educated RNs from other countries than to wait for an increase in enrollment and graduation in U.S. nursing programs (Zachary, 2001), internationally educated RNs may create a liability for the quality and safety of patient care. Some internationally educated RNs have difficulty with communication because of the language or culture differences, which causes lapses in patient safety and quality of care. There is also a gap in comparative assessments on care outcomes and safety between those who are educated in the United States and those who are internationally educated. More research is needed to investigate these relationships. The demand for foreign-educated RNs will likely continue or increase; interventions developed to improve communication skills among all nurses across borders are necessary.

Increasing foreign labor in nursing may have a long-term effect on our immigration policy, the wages of future nurses, and the labor composition for RNs. Importing more foreign-born or foreign-educated nurses will increase our long-term domestic nursing supply; however, we will likely shift our shortage problem to another part of the world, thus affecting the quality of care in those countries by depleting their nursing staffs. The potential problem or benefit is still unknown; the best solution to solve our nursing shortage might be to break current domestic barriers that prevent men or underrepresented races, such as Hispanics, from entering the field.

Advocacy as a Tool to Influence Nursing Policy and Programs

Contemporary nursing practice requires that nurses be well prepared to engage healthcare consumers, their families, and others about nursing's contributions to health care. Every patient care encounter is an opportunity for nurses to demonstrate their critical thinking, compassion, and professional expertise. These encounters allow the public to understand better “just how nurses save lives, alleviate suffering and even keep down healthcare cost” (Buresh & Gordon, 2006, p. 21). Nurses have a professional obligation to articulate how intellectually demanding and complex nursing care is and to demonstrate the ways in which they have developed and implemented innovative models of care that promote the goals of health reform: expanding access, improving quality and safety, and reducing costs. When nurses provide thoughtful insight and passion about nursing, the public gains an accurate

image of nurses. It is only through compelling and complete descriptions of the work of nurses that others come to value and appreciate that work. Changing the status of nursing means making the profession more visible to the public and policy makers. It requires that nurses inform and educate policy makers and leaders of healthcare delivery organizations about how patient-centered, safe, and efficient care contributes to slowing the rate of total healthcare expenditures. Nurse leaders must take responsibility to educate nurse clinicians so they can take advantage of changes in payment policies by making sure the contributions of nurses are visible. This requires using pay-for-performance measures and bundling hospital payments to patient-centered practices of its nursing staff. By linking hospital performance to nurse performance, nurses demonstrate increased understanding of the economic implications of their clinical and administrative practice. The time has come to fully recognize nursing's social relevance as the nation addresses healthcare reform legislation. The economic, political, and social forces behind healthcare reform favor the interests and advancement of the nursing profession.

Conclusion

This chapter is dedicated to preparing the next generation of nursing advocates who can purposefully and effectively contribute to shaping public policy at the national, state, and local levels. Nurses play an essential role in supporting and realizing the vision for health care in the United States. As the largest segment of the healthcare workforce, nurses need to be full partners with other health professions to achieve significant improvements at the local, state, and national levels in both the delivery

and health policy arenas. As a professional partner, nurses understand and have demonstrated expertise and experience with innovative models of care delivery, as well as the financial, technical, and political savvy to close clinical and financial gaps within a healthcare delivery system (Nickitas, 2010).

There are a variety of ways for nurses to engage in grassroots opportunities, professional development, and networking that can ensure they are well prepared to participate in healthcare and public policy reform and the policymaking process. Buerhaus, Potter, Staiger, and Auerbach (2008) suggests that nurses must intensify efforts to “increase the capacity of nursing education programs so that the aging RNs who will retire from

the workforce during 2015–2020 can (a) be replaced, and (b) the total supply of RNs can be increased to meet the increasing demand for health care” (p. 249). This increased effort will mean a commitment to a better-prepared workforce where nursing education curricula place greater emphasis on evidence-based nursing practice and where quality, safety, geriatrics, chronic conditions, and nursing care extend beyond the acute hospital setting into nonacute care settings.

With the adoption of information technologies, the expanded use of care delivery models (including care coordination and transitional care), and a better-prepared nursing workforce, society will benefit from increased nurse autonomy, productivity, and satisfaction.

Discussion Questions

1. Describe how nurses can use their knowledge, perspective, experiences, and skills as communicators to change public policy at all levels of government.
2. What are the most critical questions facing nursing for which policy makers need evidence to inform their decision making?
3. What is the role of government in advancing the impact of nursing on performance improvement and patient outcomes?
4. Discuss how nurses can position themselves to lead change to improve health and health care and drive policy.

Legislative Resources

- Congress.gov: Summaries and status of bills, and text of congressional bills and public laws. <http://beta.congress.gov/>
- Congressional Budget Office (CBO): Reports and analyses of congressional budget and cost issues. <http://www.cbo.gov/>
- Office of Management and Budget (OMB): Information about the president’s budget proposals and management policies. <http://www.whitehouse.gov/omb/>
- The White House: Information about executive branch initiatives and policies. <http://www.whitehouse.gov/>
- U.S. Government Accountability Office (GAO): Studies and reports about how to ensure accountability of the federal government and improve its performance. <http://www.gao.gov/>

- U.S. House of Representatives: Information about members of the House of Representatives, house committees, and legislation. <http://www.house.gov/>
- U.S. Senate: Information about members of the Senate, senate committees, and legislation. <http://www.senate.gov/>

Federal Agency Sites

- Agency for Healthcare Research and Quality (AHRQ): Information about grants available for colleges of nursing. <http://www.ahrq.gov/>
- Bureau of Health Professions: Information about grants available from the Division of Nursing. <http://bhpr.hrsa.gov/nursing/>
- Bureau of Labor Statistics: Economic and labor statistics of the U.S. workforce. <http://www.bls.gov/home.htm>
- Centers for Disease Control and Prevention (CDC): Information about protecting the health and safety of people, and credible information to enhance health decisions. <http://www.cdc.gov/>
- Centers for Medicare and Medicaid Services (CMS): Information about the agency that administers Medicare and Medicaid. <http://www.cms.gov/>
- Department of Homeland Security: Information about the mission and purpose of homeland security. <http://www.dhs.gov/>
- Federal Register: Rules, proposed rules, and notices of federal agencies and organizations, as well as executive orders and other presidential documents. <http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR>
- Health Care 411: Weekly audio and video programs featuring the latest research findings from the Agency for Healthcare Research and Quality. <http://www.healthcare411.ahrq.gov/>
- Indian Health Service (IHS): Information about grants available for colleges of nursing, scholarships, and loan repayment programs for nursing students. <http://www.ihs.gov/>
- National Institute of Nursing Research (NINR): Information about extramural research programs, training opportunities, the advisory council and *The Outreach* newsletter. <http://www.nih.gov/about/almanac/organization/NINR.htm>
- National Institutes of Health (NIH): Information about grants available to colleges of nursing, links to various NIH institutions, and the latest health information. <http://www.nih.gov/>
- NIH Guide: The NIH Guide is available on the NIH's Office of Extramural Research (OER) website. <http://grants.nih.gov/grants/oer.htm>
- U.S. Department of Education: Information about projects sponsored by the Department of Education and student financial assistance. <http://www.ed.gov/>
- U.S. Department of Health and Human Services (HHS): Information about grants available for colleges of nursing and current HHS research. <http://www.hhs.gov/>
- U.S. Department of Labor: Information about workforce issues and policies. <http://www.dol.gov/>
- U.S. Department of Veterans Affairs: Information about the veterans' health system and services. <http://www.va.gov/>

Other Related Sites

- Access Healthcare Services: Leading nurse staffing agency, servicing healthcare facilities in all 50 states. <http://www.accesshealthcareservices.com>

- American Council on Education (ACE): Represents broad higher-education policy concerns, regulatory issues, budget, appropriations, student aid, and testimony. <http://www.acenet.edu/Pages/default.aspx>
- Congressional Quarterly (CQ): Information and insight about government and politics. <http://www.cq.com>
- Institute of Medicine (IOM): Information and advice concerning health and science policy. <http://www.iom.edu/>
- Johnson and Johnson Campaign for the Future of Nursing: Information about careers in nursing. <http://www.discovernursing.com/>
- Library of Congress: Information about how to research at the Library of Congress. <http://www.loc.gov/>
- MEDLINE: This site, sponsored by the National Library of Medicine, is one of the most comprehensive bibliographic databases online. It contains bibliographic citations and author abstracts from the past 4 years from biomedical journals published in the United States and foreign countries. The database covers many fields, including nursing and the healthcare system. More than 33,000 records are added each month with material from special list journals, like the *International Nursing Index*. <http://www.nlm.nih.gov/pubs/factsheets/medline.html>
- National Library of Medicine (NLM): Information about grants available to colleges of nursing, research activities, and NLM services. <http://www.nlm.nih.gov/>
- Nursing Jobs: Offers permanent, per diem, or travel nursing jobs. <http://www.nursing-jobs.us/>
- Robert Wood Johnson Foundation (RWJF): Information about research grants to study health care issues. <http://www.rwjf.org/en/about-rwjf.html>

- Roll Call: News about Capitol Hill and politics in Washington. <http://www.rollcall.com/>
- The Joint Commission: Information about the safety and quality of care provided to the public due to health care accreditation. <http://www.jointcommission.org/>
- *The Washington Post*: News about Washington, national politics, and policy. <http://www.washingtonpost.com/>

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