

Contribution of Nursing Education Programs to the Implementation of the Affordable Care Act in North Carolina

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Registered nurses play an important role in ensuring the delivery of quality health care, and their education is one key to achieving the goals of the Affordable Care Act. This article explores the contributions that nursing education programs in North Carolina can make in helping this legislation achieve its objectives.

The Affordable Care Act, passed by the US Congress in March 2010, was enacted to expand health insurance coverage to greater numbers of people, to improve population health through prevention, to increase the supply of health professionals, to expand long-term care services, and to improve health outcomes [1]. Registered nurses (RNs) play an important role in ensuring the delivery of quality health care, and their education is one key to achieving the goals of the Affordable Care Act. This article explores the nursing resources that are needed in North Carolina to implement health care reform and the contribution that nursing education programs can make in helping this legislation achieve its objectives.

Current Population of RNs and Nursing Students

In the United States, there are approximately 3.1 million nurses, or approximately 1 RN for every 100 people, based on a US population of 308,745,538 [2]. Nurses make up the largest and one of the more versatile groups of health care professionals: they effectively promote health, prevent illness and disease, detect early symptoms of disease, and provide nursing management for chronically ill and dying individuals.

There are currently 91,926 North Carolina-licensed RNs employed in nursing, 84,775 of whom work inside the state [3]. The ratio of nurses to residents in the state is roughly 1 to 112, based on a population of 9,535,483 [4]. According to the North Carolina Board of Nursing, 3,498 individuals successfully passed the National Council Licensure Examination for Registered Nurses in North Carolina in 2010 [5].

Many of these newly licensed RNs graduated from one of the 18 baccalaureate programs, 2 diploma programs, and 59 associate's degree programs that are dispersed across the state. Given that nursing students are actively engaged in clinical practice for at least 2 years of their undergraduate

education, at any given time approximately 7,000 undergraduate nursing students are practicing with faculty supervision in North Carolina communities, and more than 1,000 graduate nursing students are practicing in advanced roles.

Nursing students are being educated to conduct health assessments, provide vaccinations, assess dietary and exercise and activity patterns, teach health promotion, detect early symptoms of illness and disease, and manage acute and chronic illness. Increasingly, these interventions are being performed in community-based settings—such as preschools, schools, workplaces, public health clinics, mental health clinics, home health settings, faith-based communities, and long-term care settings—instead of in traditional, hospital settings.

Levels of Educational Preparation Among Nursing Students

At present, nurses are prepared at the diploma, associate's degree, and baccalaureate levels; such nurses are considered to be generalists in nursing. At the master's level, students develop a clinical specialty or proficiency in a functional area, such as education or administration. At the doctoral level, scientists are produced in doctor of philosophy (PhD) programs. Advanced practice nurses undergo further professional development in doctor of nursing practice (DNP) programs.

Typically, nurses prepared with a diploma or associate's degree in nursing are qualified to practice with individuals, typically in hospital units or long-term care settings. Nurses with a baccalaureate are more broadly educated and work in these areas, as well as in community health settings. Nurses prepared with a master's degree typically include clinical nurse specialists, nurse practitioners, nurse anesthetists, nurse midwives, administrators, and educators, who practice in a variety of health care and educational settings.

Electronically published September 23, 2011.

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N C Med J. 2011;72(4):289-292. ©2011 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved. 0029-2559/2011/72408

At the doctoral level, most PhD-prepared nurse scientists assume educator positions or lead research in practice settings; nurses prepared with a DNP practice in a variety of settings and sometimes teach.

Because of shortages of appropriately educated staff, nurses have often been employed in positions in practice and academic settings before they have attained the requisite level of education and/or experience. For instance, in North Carolina, nurses have been employed in community health positions before they attained a baccalaureate or completed coursework in community health nursing. Many clinical faculty members in the community college system have not yet attained a master's degree in nursing. A number of nurse managers assume management positions before having attained a master's degree in nursing administration. These situations produce an environment that is unfair to the nurse and to the client base they serve. Nurses also may not achieve the quality outcomes that are expected for their clients if their preparation for the role is inadequate.

With the impetus in health care reform for quality outcomes and accountability, nursing education programs must be rigorous in their preparation of nursing graduates, and employers must be expected to hire nurses who are appropriately credentialed for their positions. Appropriate educational level, licensure, and certification should be assessed in relation to the needs of the nursing position. Increasingly, evidence in the nursing literature demonstrates that more-highly prepared nurses will generate better health care outcomes.

The Institute of Medicine of the National Academies (IOM) has suggested that each state achieve a 4:1 ratio of nurses prepared with a baccalaureate to those prepared with an associate's degree and increase the number of nurses with advanced degrees [6]. The American Nurses Association has also endorsed the position that nurses prepared with an associate's degree or diploma in nursing should earn baccalaureate degrees within 10 years after earning the diploma or associate's degree [7].

North Carolina has been moving proactively in these directions, with the establishment of several demonstration projects whereby community colleges partner with baccalaureate programs to offer simultaneous degree work toward the associate's degree in nursing and the bachelor of science in nursing (BSN) degree. Public and private colleges and universities also have moved ahead with the addition of master's degree programs and PhD and DNP programs, to advance the education of nurses in specialty areas of practice and in education, administration, and research areas. The University of North Carolina system is currently evaluating the addition of several DNP programs to increase the education of advanced practice nurses.

The levels of education among working RNs in North Carolina are presented in Table 1. Currently, 49% of nurses in the state are educated at less than a baccalaureate level. To ensure that 80% of nurses are prepared with the bacca-

TABLE 1.
Education Levels Among Working Registered Nurses (RNs) in North Carolina

Education level	RNs, no. (%) (N = 91,926)
Diploma in nursing	8,220 (9)
Associate's degree in nursing	36,661 (40)
Baccalaureate in nursing	29,969 (33)
Baccalaureate in other field	4,998 (5)
Master's degree in nursing	8,349 (9)
Master's degree in other field	3,030 (3)
Doctorate in nursing	313 (<1)
Doctorate in other field	377 (<1)
Unknown	9 (<1)

laureate as recommended by the IOM, an additional 27,926 nurses currently prepared with a diploma or associate's degree in nursing would need to be educated at the baccalaureate level, requiring substantial expansion of RN-BSN programs. To increase the supply of health professionals, expansion of generic baccalaureate nursing programs will also need to occur. With only 10% of nurses in North Carolina prepared with advanced degrees in nursing, growth of nursing programs offering a master's degree in nursing, a DNP, and/or a PhD is also vital for the implementation of health care reform objectives. The expansion of enrollment in nurse practitioner programs is particularly important to meet the Affordable Care Act goals for health promotion and prevention.

Recommendations for Changes in Nursing Education

To meet the demands of an increasing population, a rapidly expanding older adult population in North Carolina, and the Affordable Care Act objectives, a number of changes in nursing education must be made.

Enrollment in baccalaureate nursing programs—both in generic, 4-year programs and in RN-BSN programs—needs to be expanded. The current ratio in North Carolina is 1 nurse to 112 people, compared with a ratio of 1 nurse to 100 people at the national level. Evidence in the nursing literature has demonstrated that appropriate levels of staffing with baccalaureate-prepared nurses lead to better patient outcomes. Compounding the current nursing shortage is an increasingly diverse population, particularly in the 55 and older age group. This population will require baccalaureate-prepared nurses who can meet the health care needs of older adults in a variety of environments in the community. Also, the recommendation by the IOM that 80% of nurses in the state are prepared with the baccalaureate must be addressed. This recommendation means that North Carolina will need a very large expansion of RN-BSN programs and innovative educational delivery systems, such as online enrollment and dual enrollment in associate's degree and baccalaureate programs.

Nurses will need to be educated to provide transitional care across many health care, home, and work environments. With a focus on health promotion and prevention, nurses increasingly will need to be prepared to practice in day care, schools, workplaces, public health settings, home health settings, mental health settings, long-term care settings, clinics, and other nonhospital-based places of care. Preparation for working in acute care settings will need to continue, but with a focus on transitioning the client to other nonhospital-based environments. Nursing education practicums should reflect the focus on health promotion and prevention, with particular attention to the needs of the aging population.

Nursing students should be prepared to use health care technology to promote health, prevent disease, teach clients, and document outcomes of care. As high-speed Internet services become more available across the state, these resources may be used to share health care information, to promote health and prevent disease. Appropriate health care teaching materials may be shared electronically with clients. Finally, electronic medical records will allow nurses to enter data into a common database that can be shared appropriately with the client and other health care professionals.

Nursing education programs, government agencies, the health care industry, and the private sector need to focus on achieving a common set of health care goals. The objectives of the Affordable Care Act and Healthy North Carolina 2020 must be widely disseminated to all stakeholders in North Carolina. To achieve a high standard of health care for all, collaboration among nurse educators, other health care professionals, government agencies, the health care industry, and the private sector must occur. Through their clinical practicums, nursing faculty, the 7,000-plus undergraduate nursing students, and the 1,000-plus graduate nursing students each year can make sizeable contributions to the effort to achieve the goals of the Affordable Care Act and Healthy North Carolina 2020.

Nursing students need to be educated to practice within the full scope of their practice. Nursing students educated at the baccalaureate level are broadly qualified to perform comprehensive health assessments of individuals and of community needs. They are well prepared to deliver primary, secondary, and tertiary care. Yet in practice, RNs oftentimes revert to the customs of the health care setting in which they work, limiting themselves to a circumscribed set of functions that does not fully recognize the full scope of the nursing role protected by the North Carolina Nurse Practice Act. During the education of nursing students, their autonomy as RNs must be reinforced to ensure they engage in the full scope of nursing practice that will improve the health of our citizens.

Enrollment in nurse practitioner programs must be expanded to meet the goals of the Affordable Care Act for health promotion, prevention, long-term care, and improvement of health outcomes. With the consistent growth of

the population, particularly in the 55 and older age group, and the increased number of people who will be covered by health insurance plans, programs preparing nurse practitioners must be expanded by at least 33% to meet the growing need for primary care delivery. The growth of DNP programs is particularly important for the production of highly prepared advanced practice registered nurses.

The growth of baccalaureate and graduate programs in nursing must go hand in hand with a sustained effort to prepare nursing faculty. An increased number of doctorate-prepared nurse educators are needed to teach students at the baccalaureate and graduate levels, and a continued effort must be made to ensure all faculty in associate's degree in nursing programs are prepared with at least a master's degree in nursing.

Continuing support and funding for nursing education programs should occur only when there is a consistent track record of full approval by the North Carolina Board of Nursing and accreditation by a specialized nursing accrediting agency. Program resources need to be provided to ensure that all existing programs can satisfy the state administrative law requirements and the requirements for specialized accreditation. Programs that fail to meet these requirements despite having been allocated adequate resources should be closed. When the requirements of the North Carolina Board of Nursing and the accrediting agencies are met, the outcomes expected of a quality nursing education program are being achieved.

Nursing research in graduate nursing programs should address health promotion and prevention in diverse populations across the lifespan. New models of health care delivery should also be examined, and those that are effective should be implemented. With a ratio of 1 nurse for every 110 people in North Carolina and the nursing profession's background of providing health promotion and preventive care, nurses are positioned to deliver health care with a different structure and focus than that of the acute care system that has dominated in the past. Comparative models of effective delivery of quality nursing care may be studied for quality, access, and cost outcomes.

In summary, nursing education programs in North Carolina are key stakeholders in preparing the future nursing workforce, which will help reach the objectives of the Affordable Care Act. The state faces challenges in the expansion of programs at undergraduate and graduate levels, which is desperately needed to implement health care reform. There is also the challenge to prepare enough qualified nursing faculty for all of the diploma, associate's degree, BSN, MSN, PhD, and DNP programs in North Carolina. Students must be educated to promote health across the lifespan and across care settings. Technological skills are paramount to effective delivery of quality care by nurses. All public, private, and governmental entities must work together to achieve the Affordable Care Act goals, with expectations for a particular set of outcomes. Finally, sub-

stantial growth in nursing education programs is needed, at present and in the future, to meet the growing needs of the population, particularly those of adults aged 55 years and older. NCMJ

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Acknowledgment

Potential conflicts of interest. E.K. has no relevant conflicts of interest.

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