Building a Nursing Workforce for the 21st Century

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Today, as health-care reform begins expanding health-care coverage and access and as our population ages, we face a significant nursing shortage. To address the challenge of educating enough nurses with the skill sets required for the 21st century, the Center to Champion Nursing in America (CCNA), the Robert Wood Johnson Foundation, the U.S. Employment and Training Administration, and the U.S. Health Resources and Services Administration cosponsored two national Nursing Education Capacity Summits. This article provides the national view of the initiatives resulting from the summits and further explores the challenges in nursing education and nursing practice to ensure enough well-prepared nurses for the future.

In 2008 and 2009, the Center to Champion Nursing in America (CCNA), the Robert Wood Johnson Foundation, the U.S. Employment and Training Administration, and the U.S. Health Resources and Services Administration (HRSA) held two national Nursing Education Capacity Summits. These summits addressed critical issues regarding educating sufficient numbers of nurses with the skill sets required in the 21st century (Cleary et al., 2010).

To ensure a 21st-century nursing workforce with the skills and knowledge America needs, the CCNA is leading efforts to:

- remove barriers that limit nurses’ ability to provide the health care consumers need
- retain older nurses beyond the traditional retirement age
- develop the competencies of newly graduated RNs, using residencies.

Nursing Shortage by the Numbers

Registered nurses (RNs) are well positioned across the health-care system to increase access to care and provide high quality, cost-effective health care (Kane, Shamiyan, Mueller, Duval, & Wilt, 2007). Unfortunately, just as our nation tries to expand health-care coverage and access and as our population ages, we face a nursing shortage estimated at 260,000 over the next 15 years (Buerhaus, Auerbach, & Staiger, 2009), and that number does not tell the whole story. We need the right number of nurses with the right skill sets.

According to a recent Omnibus Survey, 87% of Americans agree that health reform laws must address the current shortage of nurses and nursing faculty, and 88% agree that ensuring enough nurses to monitor patient conditions, coordinate care, and educate patients should be part of the effort to improve the quality of health care. Agreement is strong regardless of region, sex, age, party affiliation, voter type, income, or race. Americans clearly perceive the value of nurses. In all, 87% agree that nurses can play an important role in reducing health care costs in the areas of patient safety, medical-error prevention, care coordination, and primary and preventive care (Center to Champion Nursing in America [CCNA], 2009b).

Challenges in Nursing Education

A shortage of nursing faculty is forcing nursing schools across the country to turn away thousands of qualified applications each year. In the academic year 2007–2008 alone, more than 93,000 were turned away from pre-licensure registered nursing programs (National League for Nursing [NLN], 2008). The most common reasons for not accepting more students are inadequate numbers of qualified faculty and insufficient clinical training sites (American Association of Colleges of Nursing [AACN], 2009c).

The average age of a nurse educator in the United States is 53.5 (AACN, 2009c), and the pipeline for new nursing faculty is woefully inadequate. About 60% of nurses begin their careers with an associate degree. A small percentage pursues additional education, and very few achieve the master’s or doctoral degrees required to become educators (Bevill, Cleary, Lacey, & Nooney, 2007; Joynt and Kimball, 2008).

Nurses who do acquire high levels of education are lured from lower-paying academic settings to more lucrative jobs in clinical settings. A study published by the American Association of Colleges of Nursing in 2009 found the average salary of a master’s-prepared nurse practitioner was $84,250, and the average for a master’s-prepared faculty member was $69,489 (AACN, 2009b). Also, a 2008 statewide survey by the North Carolina Center for Nursing revealed that faculty salaries are lower and often workloads are disproportionately high (North Carolina Center for Nursing, 2008).
Enrollment in nursing schools is also constrained by an inadequate number of sites where clinical training can take place. In a 2008 survey, baccalaureate-nursing programs identified “insufficient clinical sites” as the second most limiting factor to accepting a greater number of applications, right behind the faculty shortage (AACN, 2009b).

**Solutions in Nursing Education**

After the two national collaborative summits, CCNA provided ongoing technical assistance to 30 state teams on developing state-level strategies for expanding nursing education capacity. Teams are comprised of representatives from nursing education, health-care delivery systems, state government, state workforce entities, consumer groups, local business, philanthropies, and other stakeholders. Technical support is geared toward helping states expand capacity by fostering collaborative learning experiences that allow sharing of best practices and lessons learned along the way (Ronald et al., 2010).

**More Federal Funding**

To increase educational capacity, policymakers and other stakeholders are finding new ways to boost funding for faculty development and diversity. In many states, funding increases are out of reach because of severe budget constraints. However, federal funding for nursing education has reached historically high levels.

The American Economic Recovery and Reinvestment Act (ARRA) included $500 million to address critical health-care workforce shortages. About $200 million of this funding was dedicated to tackling the growing nursing (and other primary-care provider) shortages by providing a much needed funding increase for the Title VII and VIII nursing and other health-care workforce development programs administered by the HRSA. Another $250 million was allocated to the Department of Labor for competitive grants for job training and placement in high-growth sectors, with priority given to health-care jobs.

Also in 2009, Title VIII nursing education programs received $171 million, an increase of almost $15 million over fiscal year 2008. This increase is on top of the $500 million provided to address health workforce shortages through ARRA. In 2010, Title VIII funding was increased to $244 million, including an increase from $12 million to $25 million for the nurse-faculty loan repayment program and an increase from $27 to $94 million for the nurse loan and repayment program.

**Expanding Learning Opportunities**

New strategies for increasing the faculty pipeline and innovations for expanding clinical learning opportunities have been developed. These initiatives are critical to expanding nursing education capacity (Cleary, McBride, McClure, & Reinhard, 2009).

**RN-to-MSN Programs**

Designed for experienced diploma or associate-degree nurses, these programs provide direct enrollment into master’s-degree programs that encompass completion of upper-level baccalaureate course work as well. Graduates of these programs often receive their BSN and MSN simultaneously. According to AACN, there were 160 RN-to-MSN programs in the U.S. in 2009 (AACN, 2009a).

**Accelerated BSN and MSN Education**

These programs are designed for applicants who hold a baccalaureate (or higher) degree in another field. Most students are able to complete the BSN within 18 months or the MSN in 3 years. In 2008, there were 218 accelerated BSN and 57 accelerated MSN programs across 43 states, and demand for these programs has increased steadily, as have enrollments (AACN, 2009d).

**Collaboration between Community Colleges and Universities**

These partnerships are designed to prepare more nurses with baccalaureate degrees and to ensure competencies needed in the 21st century by creating common admission standards and core curricula and sharing resources, such as faculty, simulation labs, and clinical placement systems. Led by groundbreaking work by the Oregon Consortium for Nursing Education (Tanner, Gubrud-Howe, & Shores, 2008), a total of 11 of the 30 states receiving technical assistance on expanding nursing education capacity from CCNA are working to implement collaborative models of nursing education.

**Dedicated Education Units**

Dedicated education units within health-care delivery systems provide clinical education for upper-level nursing students, while delivering care that results in high patient satisfaction. In these units, qualified staff nurses are paired with one or two student nurses who shadow them, often for an entire semester. Faculty members provide guidance for multiple clinical instructors, expanding the numbers of students they can educate (CCNA, 2009a).

**Online State or Regional Clinical Placement Systems**

Nursing programs and health systems in many states and regions have increased efficiencies in clinical placements of students through centralized, real-time systems for scheduling clinical placements. The process is relatively simple: Health-care agencies enter information online concerning available opportunities and times for clinical rotations that nursing schools can request (Joynt and Kimball, 2008).

**Simulated Clinical Learning Experiences**

Greater access to clinical simulation allows students to learn in a safe environment, increases student-to-faculty ratios, and guarantees exposure to critical clinical scenarios. Advances in the development of simulation technology, partnerships, and sharing of simulation scenarios make simulation training for all types of health-care providers more accessible and realistic (Jeffries, 2009).
Regional Implications Related to Education

Because boards of nursing (BONs) approve nursing education programs in most states, regulation plays a valuable role in expanding capacity. Reasonable flexibility that provides the opportunity to evaluate innovations in nursing education is critical. Building an evidence base for the most effective mix of simulated and patient-care experiences would provide further guidance, strategic planning, and implementation of clinical learning experiences in nursing education programs throughout the country. Support of new partnerships and collaborative efforts will be critical in providing incentives for such partnerships. Approval of arrangements that allow students to earn dual degrees in the same program, such as in RN-MSN programs, is important. Regulatory boards can also be a vehicle for disseminating best practices and for collecting nurse supply data to determine how we are doing in expanding the nursing workforce, both in terms of numbers and competencies.

Challenges in Nursing Practice

Over the next few decades, the aging boomer generation will stretch America’s health-care resources, including our nursing workforce, and alter the array of competencies needed. The good news is that many boomers are “aging well” at a greater rate than their ancestors (Potkanowicz, Hartman-Stein, & Biermann, 2009). However, age is still a major risk factor for many chronic illnesses. More than 70 million Americans age 50 and older have at least one chronic illness, and 11 million live with five or more chronic conditions (AARP Public Policy Institute, 2009). This scenario results in growing need for primary care, chronic care management and care coordination, and transitional care and thus an increased demand for advanced practice RNs (APRNs). With the enactment of health-care reform, APRNs will also play a large role in ensuring access to care.

The economic downturn late in the first decade of the 21st century has resulted in older workers staying in the workforce longer. However, it is projected that RNs in their 50s will exceed all other age cohorts by 2012 (Auerbach, Buerhaus, & Staiger, 2007). What happens when this age cohort exits the workforce while, driven by the health-care needs of an aging population, the demand for nursing care will remain at an all-time high? Not only will there be an inadequate supply of nurses in terms of the numbers needed to deliver quality care, but there will be a loss of wisdom and knowledge when nurses at the expert level of practice leave organizations, experience-based knowledge is lost (Bleich et al., 2009).

New RNs joining the workforce face a good deal of variance in how they transition from school to work. According to Kovner and Brewer (2009), the turnover rate among RNs in the first 2 years of their careers is 26%. Turnover is costly and may reflect a search for a safe place to land and mentoring that is so important on the journey to developing expertise.

Nurses are also leading the way in providing a health-care safety net in community health centers. Public health nurses are essential to promoting population health and creating the infrastructure for disaster preparedness. However, severe budget cuts in local and state health departments have led to the reduction or elimination of the contributions of public health nurses. Historically, every state health department had an executive public health nurse position that provided leadership and coordinated public health nurse activities. Today, only 23 states support such a leadership position (Association of State and Territorial Directors of Nursing, 2008). This change has profoundly affected the voice of public health nursing and its capacity to advocate issues in the policy arena.

Solutions in Nursing Practice

RNs bring a lot to the table in terms of health promotion in primary care as well as in chronic disease management. Studies demonstrate that for more than 40 years, APRNs have been delivering safe and effective health care to all populations, across settings, and in many specialties. Research shows no difference in outcomes of primary care delivered by nurse practitioners and physicians, including such outcomes as patient health status, number of prescriptions written, return visits requested, and referrals to other providers (Lenz, Mundinger, Kane, & Hopkins, 2004). A recent review of the quality and effectiveness of care provided by APRNs from 1990 to 2008 further demonstrates evidence of high quality (Stanik-Hutt, Newhouse, White, & Johantgen, unpublished data).

Research continues to show that hospital care and transitional care by APRNs can reduce the number of hospital days for patients (Lenz et al., 2004; Naylor, 2006), good news for payers, patients, and their families. Nurse-led clinics are especially effective in secondary prevention or the care provided to patients who are striving to stay as healthy as possible while learning to live with one or more chronic diseases, such as diabetes or heart disease (Raftery, Yao, Murchie, Campbell, & Ritchie, 2005). Nurses in these clinics provide care coordination services as well as direct care.

Recently, the board of AARP (formerly known as the American Association of Retired Persons) approved adding new language to the AARP Policy Book, which guides AARP policy initiatives at both the state and federal level. The language proposes that current nurse practice acts and accompanying rules should be interpreted or amended where necessary to allow APRNs to practice as fully and independently as defined by their education and certification.

With a rapidly aging population, nurses will have greater opportunities to provide leadership for support of family caregivers. Nurses can also serve as leaders in promoting and imple-
menting end-of-life care that is markedly different from the 20th century. However, after the economic recovery, retaining older nurses in the workforce will be critical to having the highly skilled nurses Americans need. The CCNA is seeking to serve as a catalyst for such retention.

For example, the CCNA has created a national advisory group to help disseminate a successful innovation developed by Massachusetts General Hospital. This nurse residency program pairs older, experienced nurses and younger nurses with 2 to 5 years of experience. The residency program promotes retention and meets the growing demand for geropalliative care competencies (Lee, Coakley, Dahlin, & Ford-Carleton, 2009).

Nurse residencies are emerging not only as important transitions for new graduates that result in a more competent nurse workforce, but also as a powerful tool in reducing turnover among new nursing graduates. In 2009, Goode and colleagues reported a dramatic reduction in turnover to 5.7% among BSN-prepared nurses who participated in a year-long residency program immediately after graduation and licensure (Goode, Lynn, Kresk, & Bednash, 2009).

Regulatory Implications Related to Practice

APRNs and other RNs should be members of interdisciplinary teams in care coordination efforts. In regulation and certification of medical homes, APRNs should qualify as primary-care providers and lead these efforts, as is stated in the 2010 Health Care Reform Law (see Table 1). Top among the recommendations of a panel convened in January 2010 by the Josiah Macy Foundation is this: State and national reimbursement policies should remove barriers (such as not being included on provider panels) that make it hard for APRNs as well as physician assistants to serve as primary-care providers (Josiah Macy Foundation, 2010). Nurse practice acts should indicate that APRNs can practice independently and with full prescriptive authority. Laws and rules should be updated, so the BON is the sole regulatory authority of all RNs—including APRNs.

BONs can also play a monumental role in assuring adequate time and mentoring for skill acquisition and confidence-building among new nursing graduates. Regulatory solutions include standardized residencies and graduated licensure. BONs can also recognize residencies for the purpose of retooling nurses in specialty areas later in their careers as part of continuing competency requirements.

Conclusion

Building a workforce with the size and skills needed for the 21st century poses challenges to nursing practice and education. To meet them, we must remove barriers that keep nurses from providing the health-care consumers need, retain older nurses beyond the traditional retirement age, and develop the competencies of newly graduated nurses. Through collaborative initiatives with consumer and national nursing organizations, we have already begun to develop innovative solutions to the challenges we face. But we still have much to do if we are to deliver the nursing workforce of tomorrow.

References


TABLE 1

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<tr>
<td>The Health Care Reform Law enacted in 2010 resulted in additional provisions for building the 21st century nursing workforce:</td>
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<td>• The Graduate Nurse Education Demonstration Program aims to increase the number of highly skilled advanced practice nurses by providing $200 million to bolster their training. This program lays the foundation to transform the way Medicare pays for nursing education, targeting dollars toward educating nurses with the specific skills needed to meet the needs of Medicare recipients. Advanced practice nurses can provide the primary and preventive care, chronic-care management, and care coordination needed to reduce waste and bring down costs while increasing access and quality.</td>
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<td>• The National Health Service Corps provides $150 million in additional support for nurse practitioners who agree to serve at least 2 years in underserved communities across the country.</td>
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<td>• Programs for nurses who agree to teach in accredited nursing schools provide expanding loan forgiveness.</td>
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<td>• Lifting an arbitrary cap on spending for doctoral nursing programs to 10% of total grant funding awarded for expanding nursing education programs bolsters training for future nursing professors.</td>
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<td>• Reauthorization of Title VIII funding of the Public Health Service Act creates resources for nursing education and workforce development at historically high levels.</td>
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<td>• A demonstration program for the Family Nurse Practitioner Training Program provides a 1-year residency program for nurse practitioners in federally qualified health centers and in nurse-managed health clinics.</td>
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Source: http://www.aarp.org/makeadifference/advocacy/GovernmentWatch/Nursing/
Brenda L. Cleary, PhD, RN, FAAN, a Robert Wood Johnson Foundation Executive Nurse Fellow alumna, is the Director of the Center to Champion Nursing in America, a joint initiative of AARP, the AARP Foundation, and the Robert Wood Johnson Foundation. A consumer-driven, national force for change, the Center seeks to ensure that our country has the nurses it needs to care for all of us, now and in the future.