

## COMMENTARY

# Providing Health Care to Aging North Carolinians: Educational Initiatives in Geriatrics

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Between the years 2000 and 2030 the number of baby boomers over 65 in the United States will almost double, and their percentage of the population will increase from 12% to 20%.<sup>1</sup> The older population in North Carolina will more than double, with the number of North Carolinians over 65 increasing by 121%, and the population over age 85 increasing by 144%.<sup>2</sup> Concurrently, the total population of North Carolina will increase by about 50%.<sup>3</sup> This older population will live longer and have less disability than those in previous generations but will suffer with more chronic diseases, particularly Alzheimer's and diseases associated with obesity, such as diabetes, arthritis, and cancer. Currently, more than three-quarters of adults over age 65 suffer from at least one chronic medical condition that requires management, and 20% have 5 or more chronic conditions.<sup>4</sup> This article will address the problems we will be facing, examine current educational initiatives in geriatric medicine and gerontological nursing, and discuss a rationale for gerontologizing health care education in the future.

With this projected staggering increase in the number of patients over 65, North Carolina faces several challenges in providing even adequate health care for the elderly:

- The current shortage of geriatric providers will worsen in the coming years.
- Health care providers receive insufficient training in geriatric care.
- Reimbursement is inadequate for geriatric providers to attract sufficient new providers and caregivers into the field.

This year's Institute of Medicine of the National Academies (IOM) report *Retooling for an Aging America: Building the Health Care Workforce* calls for a dramatic increase in the number of gerontological and geriatric providers in order that the needs of the older population are addressed comprehensively, services are provided efficiently, and older patients are encouraged to be active partners in their own care. The report found that less than 1% of physician assistants, nurses, and pharmacists either specialize or are certified in geriatrics. Only 4% of social workers, one-third of the number currently needed, specialize in geriatrics.<sup>4</sup>

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## Geriatric Medical Training

Geriatric education on all levels is severely lacking and needs to be drastically revised. While 89% of medical schools began requiring geriatrics exposure in 2000, that exposure is not quantified, often brief, and much too late in their students’

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training. According to a 2001 study, only 45% of graduates perceived their geriatric coverage as adequate, two-thirds of graduates felt adequately prepared for geriatric acute care, and only half felt adequately prepared for long-term care.<sup>5</sup> Only about half of family medicine and internal medicine graduating residents felt prepared to care for elderly patients.<sup>5</sup> Currently none of the residency review committee requirements state a minimal time of exposure for geriatric training, and only family medicine requires exposure in all settings, including nursing home and home visits.

According to the Alliance for Aging Research, the United States will need about 37,000 geriatricians in 2030.<sup>6</sup> In 2007, there were 7,128 certified geriatricians and 1,596 certified geriatric psychiatrists in the US.<sup>4</sup> North Carolina has 3.6 geriatricians per 100,000 patients, slightly less than the national average of 3.8. One estimate predicts an increase of geriatricians of less than 10% by 2030, while others predict a decline due to fewer physicians recertifying and a decreased interest in fellowship programs.<sup>4</sup> The fill rate of geriatric fellowship programs has declined over the past years and is currently at 58%.<sup>7</sup> Several intrinsic factors appear to contribute to this shortage:

- Emotionally and physically demanding working conditions.
- Misgivings about working with older patients.
- Challenges presented with multiple medications and comorbidities.

However, the most important factor of all is likely the financial disadvantages of working in geriatrics. Geriatricians must tolerate lower reimbursement through Medicare than private carriers. This is due to a low proportion of well-paying procedures in the practice and more time required to care for complex patients. The National Institute of Medicine suggests pay enhancements for practitioners (not only physicians) with certification of special expertise in geriatrics.<sup>4</sup>

The fee-for-service Medicare program provides fragmented care and precludes an interdisciplinary approach by paying for only one visit per day. However, several interdisciplinary programs going by various acronyms—PACE, IMPACT, PROSPECT, and HELP—have shown improved care to beneficiaries while often saving Medicare money. In May 2007, United States Senators Blanche Lincoln and Susan Collins cosponsored a bill for the Geriatric Assessment and Chronic Care Coordination Act (GACCCA). It proposes to cover a comprehensive geriatric assessment with a plan to keep the patient healthy and provide coordination of care for individuals with multiple chronic conditions, including dementia.<sup>8</sup>

Currently the 4 medical schools in North Carolina and the Asheville Family Medicine program offer geriatric fellowships. East Carolina University's (ECU) Family Medicine and Internal Medicine residency programs require a month rotation in geriatrics. The family medicine program also requires a 2-year longitudinal program in nursing home and home care. For medical students, ECU uses standardized patients to teach geriatric skills in 5 sessions during the second year and requires 3 days of clinical experience during the third year. Duke requires 5 geriatric symposium days in the first year. Wake Forest has integrated geriatric knowledge

## Significance of Post Baccalaureate Training in Gerontology in Promoting Healthy Aging

*Sandra Crawford Leak, MHA*

A hopeful factor in communities' capacities to promote healthy aging among older adults is the increasing number of professionals who have post baccalaureate training in gerontology or geriatrics. In broad terms, gerontology is the study of the aging process, and geriatrics is the health care specialty related to the diseases and conditions associated with the aging process. In practice, the 2 disciplines overlap and a growing emphasis is being placed by both on how to encourage people to age successfully and stay as healthy as possible over the life course.

Given a recent wave of infusing gerontological content into a wide range of graduate curricula, professionals across a number of disciplines are more and more likely to have specific training related to promoting healthy behaviors in midlife and older adults. Frequently, such curricula also address how the community context can encourage such behaviors.

Examples of how gerontological training can influence healthy aging include:

- The medical school applicant who takes a graduate level course in health and aging and becomes interested in consumer activation for health promotion in future practice.
- The pharmacy student who pursues a concurrent post baccalaureate certificate in gerontology and interns with a "brown-bag" program to do medication safety checks.
- The registered nurse whose subsequent training in gerontological nursing leads her to develop a falls prevention program for older adults in the public health department in her community.
- The registered dietician who is a consultant to retirement communities and returns to school part-time for an MS in gerontology and goes on to teach undergraduate students about the nutritional aspects of aging.
- A group of physical therapy students with interests in older adults who become champions of "walkable" communities after a joint project on community infrastructure.

in the basic science courses of the first 2 years and, with funding from the Donald W. Reynolds Foundation, is working on an expanded curriculum which would include 11 clinical days for the third year. All 4 North Carolina medical schools offer a geriatric elective in the fourth year.

## Gerontological Nurses

Older adults already constitute up to 62.5% of a nurse's caseload. Older adults comprise 50% of hospital patients, 85% of home care patients, and over 90% of nursing home patients.<sup>9</sup> Yet most nurses have limited preparation in the principles of geriatric nursing care because few undergraduate nursing education programs included this content until recent national initiatives supported gerontological curriculum enhancements. These efforts include publication of national standards, curriculum materials, faculty development, and awards for innovative educational strategies.<sup>9</sup>

Gerontological nurse practitioners (GNPs) are advanced practice nurses with specialized nursing education in the diagnosis, treatment, and management of acute and chronic conditions often found among older adults. Employed in a variety of practice sites including ambulatory care clinics, long-term care facilities, and acute and sub-acute hospitals, GNPs collaborate with other members of the health care team to manage the health care needs of older adults.<sup>10</sup> Despite the demand for gerontological nurse practitioners, their overall numbers remain low nationwide with only 3% of all advanced practice nurses specializing in gerontology.<sup>11</sup> Nurses interested in advanced practice nursing in North Carolina are fortunate that 2 of the state's schools of nursing have graduate-level programs that lead to preparation as gerontological nurse practitioners. Duke University and the University of North Carolina at Greensboro have long-established programs that have been successful in recruiting and graduating nurse practitioners prepared to care for the rapidly growing older adult population in our state and in the nation.

## Educational Funding for Geriatric Medical and Nursing Education

There are a number of programs including the National Health Services Corps that have a long history of successfully recruiting providers into shortage areas with a loan forgiveness program. To address the shortage of geriatricians, South Carolina has instituted a geriatric loan forgiveness program. It can forgive \$35,000 of student loan debt incurred during medical school for each year of specialized fellowship training in geriatric medicine if the physician establishes a practice in South Carolina and stays for at least 5 years. The program was started in 2005 and has increased medical students' interest in fellowship programs at the University of South Carolina Medical School and the Medical University of South Carolina in Charleston.<sup>12</sup> Whether these programs will be able to sustain interest in geriatrics and increase the total number of geriatricians—or draw providers from other areas—remains to be seen.

- The family medicine physician who, because of a geriatric rotation in medical school, has an understanding of the health benefits of recognizing and addressing caregiver stress.

Gerontological training opportunities for these and other professionals who are in the position to promote healthy aging are expanding in colleges and universities across North Carolina.

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Recognizing the need to increase the number of advanced practice nurses prepared to care for our nation's older adults, the William Randolph Hearst Foundation in 2001 established endowments for scholarships for nurses pursuing careers as gerontological nurse practitioners. The University of North Carolina at Greensboro was one of 5 schools of nursing in the United States to receive this funding.<sup>13</sup> In addition to supporting gerontological nurse education curriculum initiatives for advanced practice nurses, the John A. Hartford Foundation awarded the American Association of Colleges of Nurses (AACN) a grant of \$2.23 million in 2001 to establish the Creating Careers Program. Twenty-three schools of nursing across the country received funding to award scholarships to advanced practice gerontological nursing. Duke University School of Nursing was one of the recipients of this scholarship program. Availability of these scholarships have afforded students the opportunity to complete their programs of study full-time, allowing them to more rapidly enter the workforce.<sup>14</sup> Information and applications for additional scholarship opportunities from individual schools of nursing generally are available to applying students on the school of nursing websites. Nurses pursuing a graduate degree may apply for the North Carolina Master Nurse Scholars Program scholarships which provide funding to nurses for full- or part-time study if they are committed to remaining in North Carolina following graduation.<sup>15</sup>

In March, California Senator Barbara Boxer submitted a bill to establish a federal loan forgiveness program of \$35,000 annually for 2 years of service and an additional \$40,000 annually for years 3 and 4. In addition to physicians, this program will include nurse practitioners, physician assistants, clinical nurse specialists, social workers, and psychologists who complete specialty training in geriatrics.<sup>16</sup>

Another option to address the need for geriatricians is to entice geriatric providers to stay in the field or attract retiring medical professionals into geriatrics. In 2015, more than 50% of the workforce in the United States will be over 40.<sup>17</sup> With an aging workforce we will need to consider creative solutions such as flexible work hours to allow for caregiving and innovative lateral entry programs that build on the existing knowledge of a mature health care workforce.

The Geriatric Academic Career Award has been instrumental in the development of academic geriatricians and fostering

geriatric education. This Title VII-funded program provides financial incentives to junior geriatric faculty and is renewable for 3 years. However, its funding was cut in 2006 and although resumed in 2007, it was flat-funded for 2008-2009. This allowed continuing support for prior recipients but did not provide funding for new applicants.<sup>18</sup>

### **Infusing Geriatrics and Gerontology Throughout the Curriculum**

Even with maximum support, it is unlikely that 37,000 geriatricians will be educated by 2030. It is therefore important to educate the current medical provider workforce in principles of geriatric medicine. This needs to be accomplished through drastic curriculum revisions, career-long demonstration of geriatric competence, and increases in the number of faculty teaching geriatrics. Educational settings must be expanded beyond the hospital to patients' homes, clinics, assisted living facilities, and nursing homes.<sup>4</sup>

Medical student education must include a structured, prolonged, and required experience in geriatrics. Residency training must include geriatric training for all but pediatricians and should be, at minimum, 6 months for primary care residencies. The Donald W. Reynolds Foundation and John A. Hartford Foundation have granted millions of dollars and have advanced geriatric training tremendously. However, without regulatory mandates for minimal training in medical school, non-primary care residencies and fellowships, and more extensive training in primary care residencies, less compelling agendas will capture curriculum time and money.

The National Council of State Boards of Nursing has spearheaded a growing movement in nursing education to emphasize the care of an aging population. With substantial support from the John A. Hartford Foundation, the Health Resources and Services Administration, and others, schools of nursing have made considerable strides in strengthening geriatric competence in baccalaureate graduates.<sup>9</sup> A successful model for gerontological curricular enhancement includes developing a core group of interested faculty who consider geriatrics to be essential in all courses, using available national standards and teaching resources, and strengthening links with community agencies that share a commitment to high quality nursing care for elderly patients.<sup>19</sup>

Many nurse practitioners who care for older adults also lack specialized training in geriatrics. Nurse practitioner faculty who teach in non-gerontological nurse practitioner programs are encouraged to use the American Association of Colleges of Nursing and the John A. Hartford Foundation Geriatrics Nursing Initiatives *Nurse Practitioner and Clinical Nurse Specialist Competencies for Older Adult Care* as a guide to integrate gerontological nursing content into the curriculum.<sup>11,20</sup> Designating specific hours of clinical preparation in settings across the continuum of care for older adults, assigning specific readings, and determining clinical competency of the non-gerontological nurse practitioner will help ensure that all nurse practitioners have a foundation in gerontological care.<sup>11,21,22</sup>

## **North Carolina Gerontology Consortium Continuing Education Initiative**

*Jim Mitchell, PhD*

Supported by the North Carolina General Assembly, the Institute on Aging of the University of North Carolina system was established in the mid 1990s. Its statewide advisory committee endorsed the development of a comprehensive educational program to strengthen university-based credentialing programs in gerontology and to develop a coordinated continuing education initiative for those in the workforce serving older adults. The committee endorsed the formation of a North Carolina Gerontology Consortium, approved by the University of North Carolina General Administration in May 2003, which would serve as the delivery mechanism for the proposed comprehensive educational program. The 11-campus Consortium (UNC Asheville, Chapel Hill, Charlotte, Greensboro, Pembroke, and Wilmington; Appalachian State University; East Carolina University; North Carolina State University, including NC Cooperative Extension; Western Carolina University; and Winston-Salem State University) has coordinated the web-based delivery of 18 graduate-level gerontology courses. The courses are shared among member institutions, enhancing curricular flexibility for credentialing programs and graduate students.

Drawing from the experience of web-based graduate course delivery and in partnership with the North Carolina Division of Aging and Adult Services, the Consortium is embarking upon a continuing education initiative targeting the nonclinical workforce providing community-based services to older adults. With funding from the University of North Carolina General Administration, a pilot project is underway to solicit topics for continuing education from those employed through the network of services supported by federal and state Home and Community Care Block Grant appropriations. This large segment of the workforce providing supportive services to older adults is overlooked by the clinical continuing education network. The topics will drive formation of web-based continuing education modules to be delivered through the Institute on Aging and North Carolina Division of Aging and Adult Services websites. Those completing the modules will receive a certificate of completion by the University of North Carolina Gerontology Consortium. Following consumer evaluation, the modules will be delivered nationally through partnership with the Association for Gerontology in Higher Education.

## Interdisciplinary Training in Geriatrics

Interdisciplinary training for health care professionals should begin prior to professionals entering the workforce. It is essential for graduates in the health care field and some of the social science disciplines to understand one another's role and the importance of collaboration to ensure delivery of adequate health care. While it is often difficult for students and faculty of different disciplines to schedule classes or clinical rotations at the same time, universities could consider conducting health fairs in the community for vulnerable populations where students and faculty from different programs collaborate to provide prevention screenings and health promotion information. This would allow students a first-hand opportunity to appreciate the specialized knowledge and skills set that each discipline is known for as well as refer health fair participants to their colleagues.

The National Institute of Medicine proposes a 3-pronged approach to improve the ability of the health care workforce to care for older Americans:

- Enhance the competence of all individuals in the delivery of geriatric care.
- Increase the recruitment and retention of geriatric specialists and caregivers.
- Redesign models of care and broaden provider and patient roles to achieve greater flexibility.

The redesign of models of care includes a more efficient utilization of and interaction among the interdisciplinary team. This enhances the role of direct care workers, including personal care aides, nursing aides, home care aides, and others. These people have the closest contact with elderly patients, providing vital information for geriatrics providers, and yet they are only required to have a minimum of 75 hours of training by federal mandate, and only a few states have higher requirements. The IOM report suggests increasing the minimum training requirement for certified nurse aides and home health aides to 120 hours and requiring demonstration of competence in the care of older adults for certification. While longer training is crucial, the increased requirement may deter many from entering the field of geriatrics, further exacerbating the current shortage of geriatric aides. A potential solution would be a concomitant increase in pay compared to aides with less training and without geriatric certification.

The Program for All-Inclusive Care in the Elderly (PACE) is an interdisciplinary team approach to care and is funded by

The University of North Carolina Gerontology Consortium represents the largest multi-campus organizational entity of its type in the state university system. It offers an opportunity to efficiently share expertise and instructional resources across campuses to better serve the needs of college and university students, formal and informal care providers, and citizens as we negotiate a response to the aging of North Carolina's population.

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Medicare. One remarkable result of this program has been a very low 12% turnover of direct-care workers (aides) in these programs compared to the approximately 100% turnover in most settings. This was achieved through financial support, additional training, and career advancement opportunities.<sup>23</sup> Family and friends provide the largest proportion of the care for older adults. Adequate training opportunities also need to be provided in the community to optimize care, prevent burnout, and facilitate understanding and support.

North Carolina would benefit from adopting multiple strategies to address the looming crisis in geriatric care. Some of these include:

- Expand geriatric training in all health care and social science fields.
- Provide funding for developing and/or sustaining creative educational programs that prepare geriatric health care professionals.
- Establish scholarships for health care professionals seeking a career in gerontological health care.
- Increase public awareness and support for caregivers of elderly.
- Increase reimbursement of geriatric health care providers to alleviate the critical shortage.

Perhaps one of the saving graces and best-selling points for a career in geriatrics is that, despite the low pay and myriad other frustrations, geriatricians have the highest job satisfaction of all specialties.<sup>24</sup> North Carolina will be depending on us to get this word out. **NCMJ**

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