APM
Association of
Professors of Medicine

APM Perspectives

The Association of Professors of Medicine (APM) is the national organization of departments of internal medicine at the US medical schools and numerous affiliated teaching hospitals as represented by chairs and appointed leaders. As the official sponsor of The American Journal of Medicine, the association invites authors to publish commentaries on issues concerning academic internal medicine.

For the latest information about departments of internal medicine, please visit APM's website at www.im.org/APM.

A Step toward Solving the Geriatrician Shortage

Victor A. Hirth, MD, MHA, CMD, AGSF,[a,b] G. Paul Eleazer, MD, AGSF,[a,b]
Maureen Dever-Bumba, DrPH(c), MSN, FNP-C[a]
[a]Division of Geriatrics, University of South Carolina School of Medicine, Columbia; [b]Palmetto Health Richland, Columbia, SC.

In 2006, members of the "baby boomer" generation began to turn 60, establishing population aging as one of the most significant trends of the 21st century. Between 2005 and 2030, the number of older adults in the United States will increase 90%, from 36.8 million to 70 million.[1]

Leaders in geriatric medicine have warned for decades of a geriatrician shortage.[2-7] Of additional concern is the lack of new physicians to replace those retiring or otherwise leaving geriatrics.[8-10] The degree of the geriatrician shortage is staggering. An anticipated 36,000 geriatricians will be needed by 2030, whereas the absolute number of geriatricians actually decreased from 9256 in 1998 to 6435 in 2005.[2,11]

Primary care physicians and subspecialists will likely take on the responsibility of caring for an aging population. As a result of a limited geriatrician work force, geriatric medicine has attempted to focus on the highest priority roles, such as academic missions of education and research, in addition to direct care of targeted populations who benefit most from geriatric management.[8,12,13] Even with a focused approach, it is unclear whether there will be an adequate supply of geriatrician faculty.[8,14]

An increase in the number of geriatrician faculty in both internal medicine and family medicine programs has not alleviated program director concerns of geriatrician faculty shortages as a barrier to training.[8,14,15] Recent studies estimate the necessary minimum of academic geriatricians at 1450, but an ideal goal is 2400.[3,16]

Geriatricians have the highest job satisfaction ratings among all specialties.[17,18] Several studies identified reasons residents chose to enter the field of geriatrics, including positive experiences in training and exposure to mentors; high interest in primary care; desire for optimal level of patient-care challenge; complex patients, maturity level of student in age, self-concept; and personal medical experience with family members.[10,19-21] Despite high job satisfaction rates, it remains difficult to recruit adequate numbers of candidates to the field of geriatrics. The causes of the geriatrician shortage include low remuneration, inadequate reimbursement for clinical practice, lack of professional recognition/value, insufficient research and academic opportunities, scarcity of mentors, and lack of infrastructure within geriatrics divisions.[3,10,22-26]

PRIOR INITIATIVES TO ADDRESS THE SHORTAGE

Several initiatives were undertaken in the 1980s to increase the number of geriatrician faculty. Of particular note, the John A. Hartford Foundation has funded faculty development in geriatrics since 1983 through the Hartford Centers of Excellence. The Centers of Excellence program continues to focus on attracting, developing, and retraining geriatrician faculty.[28] How-

Requests for reprints should be addressed to Victor A. Hirth, MD, Division of Geriatrics, University of South Carolina School of Medicine, 3010 Farrow Road, Suite 300A, Columbia, SC 29203.
E-mail address: victor.hirth@palmettohealth.org

0002-9343/$ -see front matter © 2008 The Association of Professors of Medicine. All rights reserved.
doi:10.1016/j.amjmed.2007.10.030

ever, the impact of this and other programs is largely dependent on having qualified applicants apply to geriatrics fellowship programs.

The number of geriatrics fellowship programs increased from 92 in 1992 to 131 in 2005, and the number of first-year fellowship positions rose from 163 in 1993 to 468 in 2006.[29,30] However, the increase in program numbers has been tempered by an inability to fill the available slots. Indeed, data from the most recent graduate medical education (GME) survey by the American Medical Association indicates that of 442 geriatrics fellowship positions, 146 (33%) were unfilled and 230 (65.5%) were filled by international medical graduates.[31] A 2004 survey of geriatrics fellowship program directors found that the main reason first-year fellowship positions were not filled was that qualified applicants did not apply to the programs.[22]

Another strategy to increase the numbers of geriatricians and the attractiveness of geriatrics fellowship training was to decrease the length of fellowship programs from 2 years to 1. However, the number of geriatrics fellows has increased only minimally, to an average of 300 per year, since the change was implemented in 1998. One serious unintended consequence of the change from 2-year to 1-year fellowships was the loss of funding for second- and third-year fellows. GME funding for second- and third-year training was eliminated because funding through the Medicare GME program is limited to fellows eligible to take the certifying examination. Therefore, the number of second- and third-year training positions fell from 96 in the last funded year to 55 today.[29] The loss of funding for second- and third-year fellows has resulted in a disproportionate effect on academic geriatrics, because most of these positions were intended to train future academicians.

The American Geriatrics Society (AGS) developed several programs to attract medical students to the field by sponsoring medical school student chapters, medical student training in aging research grants, and the Boston University Summer Institute in Geriatric Medicine. Although well-liked by students, these activities are the least of what is needed to address the recruitment shortfall.

Attracting qualified applicants to the field is one of the most daunting challenges facing the field of geriatrics. The number of medical students selecting primary care residencies in internal medicine and family medicine training has decreased in the past 20 years, from 39.2% of students in 1987 to 30.3% in 2006.[31,32] Further, as a percentage, fewer US graduates choose geriatrics as a specialty each year.

PERSPECTIVES VIEWPOINTS

- Reasons for the geriatrician shortage.
- Possible solutions to solving the geriatrician shortage.
- State legislation that can address financial disincentives to entering geriatrics medicine.

OTHER APPROACHES TO IMPROVE RECRUITMENT TO GERIATRICS

Encouraging physicians-in-training to consider a career in geriatrics remains a challenge due to financial disincentives of the specialty. Financial concerns are particularly relevant given the ever-increasing student loan burden of recent US medical school graduates.[12] In most fields of medicine, additional training translates into higher income after the training, thus offsetting the reduced income necessary to complete the training. However, in the case of geriatrics, an additional year of training may actually reduce the earning power of the trainee. For example, in 1999, an additional year of training in geriatrics was associated with a net yearly loss of $7016 for every year worked after completing a 1-year fellowship training program, and $8592 for every year worked after completing a 2-year program.[27] This discrepancy between a general internist's or family practitioner's and a geriatrician's earning potential is primarily due to the significantly higher percentage of Medicare patients (often approaching 100%).

Few other fields of medicine are faced with the challenge of proposing that residents complete additional training only to have their earning power decrease. Perhaps one benefit of this situation is that residents who select geriatrics as a career are truly dedicated to the specialty. As one trainee eloquently noted:

If a private practice geriatrician, caring for the most frail and high acuity elders, can generate only half the revenue of a general internist caring for a younger, healthier clientele, then only secular saints, missionaries, or fools will enter the field.[23]

A long-term solution to the geriatrician recruitment crisis would include meaningful reform of the reimbursement system to guarantee financial incentives for those seeking a career in geriatrics. Although a permanent solution will involve changing Medicare reimbursement for geriatricians, other major health care reforms, or other health care system changes, an interim solution that appears feasible is to offer financial incentives that will partially offset the financial burdens for those seeking a career in geriatrics.

Efforts by AGS and the Association of Directors of Geriatric Academic Programs have included national

legislation to implement educational loan forgiveness for geriatricians. This legislation, which failed to pass previously, was reintroduced to Congress under the Geriatrician Loan Forgiveness Act of 2007 (HR 2502). As of this publication, these initiatives appear to be stalled in committee. Discussions with leaders in geriatric medicine, as well as Internet searches, have yielded no local or state programs that could be implemented on a nationwide basis to address the geriatrician shortage. To date, South Carolina is the only state to have successfully enacted a loan forgiveness program for trained geriatricians (similar legislation was introduced in Oklahoma this year but did not pass). The South Carolina program, available to graduates of both public and private schools, provides $35,000 of direct-to-lender loan forgiveness for each year of geriatric medicine or geriatric psychiatry fellowship completed. In exchange, the state requires that the recipient practice for at least 5 years in the state and devote at least 60% of their practice to providing care to Medicare patients over the age of 65 years.

THE SOUTH CAROLINA CONTEXT

South Carolina has the fifth most rapidly increasing population of seniors in the United States and is viewed as an attractive retirement destination.[33] In 2030, the state is projected to rank 15th in the United States for percentage of the population aged 65 years and older.[33] Unfortunately, the same cannot be said for the numbers of fellowship-trained geriatricians or geriatric psychiatrists. State statistics list 1 geriatrics physician for every 17,000 South Carolina residents over the age of 65 years.[33]

Data from the American Association of Medical Colleges indicates medical students finishing at South Carolina state-supported schools have an average educational debt of $97,631, compared with the national average of $105,072.[34] In 2005, South Carolina had 1 geriatric medicine fellowship training program, sponsored by Palmetto Health and the University of South Carolina School of Medicine, and 1 geropsychiatry training program, sponsored by the Medical University of South Carolina. Both programs faced challenges in recruiting qualified applicants to fill vacant fellowship positions (personal communication, 2006). Given these statistics and a coalition of forces, the time for a push to enact a loan forgiveness program for geriatricians became evident.

Since the initiation of the first geriatric medicine fellowship program in South Carolina, the state's programs have struggled to identify methods to improve recruitment. The fiscal evidence previously discussed shows that the greatest barrier to those who would choose a career in geriatrics is financial. A loan forgiveness program administered through the area health education centers had been successful in attracting physicians to practice in rural South Carolina. Based on experience from this and other programs, the use of loan forgiveness could be an incentive to recruit physicians into the field of geriatrics. This approach is not unique; under the auspices of AGS, loan-forgiveness legislation had been submitted to Congress twice (108th Congress—S2075, Geriatricians Loan Forgiveness Act; 109th Congress—HR 3046 Geriatricians Loan Forgiveness Act); however, neither bill passed. Although this failure on the national level is discouraging, South Carolina's success in passing this type of legislation may increase the chances of loan forgiveness legislation being passed in other states or at a national level.

LESSONS LEARNED AND HOW OTHER STATES MIGHT OBTAIN LEGISLATION

Although legislatures and environments are different across states, several lessons from the successful passage of the South Carolina Geriatric Loan Forgiveness Act are worth discussing.

Partnerships Are Key

Undoubtedly, only with the successful working relationships of a number of organizations and interest groups can this type of legislation pass. In the spring of 2005, an informal meeting was held between the South Carolina's Office on Aging—which had been moved in 2004 to the Lieutenant Governor's Office—and representatives from aging services, medical educators, and advocates to discuss future directions and priority areas. At that time, the idea of a loan forgiveness program was discussed and was well received. At approximately the same time, advocates contacted a member of the South Carolina Silver Haired Legislature to gauge interest in supporting loan forgiveness for physicians entering the field of geriatrics. The Silver Haired Legislature's mission is to advocate for possible solutions to problems facing aging South Carolinians, make recommendations to the governor and General Assembly, and carry out these activities on a nonpartisan basis. Following these contacts, "Debt forgiveness for doctors who specialize in Geriatric Medicine" was approved as one of 10 resolutions by the South Carolina Silver Haired Legislature.

In addition, advocates met with the South Carolina AARP director as well as AARP lobbyists. After reviewing AARP policies, it was determined that the association could support loan forgiveness for physicians. Loan forgiveness also coincided with the AARP initiative to promote access to quality health care for their membership. As a result of this support, AARP lobbyists and South Carolina Silver Haired Legislature representatives were available to testify at every legis-

lative committee meeting and hearing that was open to the public.

An Expert on the State Legislatures' Operations and Membership Is Invaluable

The director of the Lieutenant Governor's Office on Aging was instrumental in identifying potential sponsors, helping time presentations of the legislation to those sponsors, and coordinating information flow among the various interest groups who were supporting the legislation. The other roles of the Lieutenant Governor's Office on Aging included drafting legislation with input from the geriatric community, gathering data and preparing a fact sheet for legislators, and testifying in support of the bills once they were introduced.

The Legislation Must Be Palatable

Given that state fiscal budgets are frequently tight, it was important to draft legislation that would be significant from an impact standpoint but close to trivial from a budget standpoint. In drafting the legislation, elements considered to be critical for success included meaningful amount of debt forgiveness; program cost to the state that would be minimal to modest; program administration that would not be cumbersome or time-consuming; inclusion of geriatric psychiatry, because that need was even greater than for medicine; and potential for expansion if the program was determined to be successful.

Physician Visibility Is Key

Throughout this process, at least one geriatrician was present at almost all legislative meetings and hearings to provide testimony. Legislative support staff and representatives were consistently impressed that "the doctor is here to discuss the importance of this legislation." The consistency in visibility and message was important to demonstrate not only the need for this legislation, but also that there was a commitment to make the legislation work when passed. This visibility, in combination with AARP, South Carolina Silver Haired Legislature, and community seniors, represented a strong demographic to the legislature that there was broad-based support for this measure.

RESULTS

The bill, H3741, was introduced and first read March 14, 2005, was ratified unanimously by both legislative houses June 7, 2005, and became a law June 14, 2005. It is important to note that the legislation passed during a very tight budget year. Further, the legislation passed after the funding cycle had been approved, which would normally prevent funding until the next fiscal cycle. However, one-time funding in the amount of $140,000 was allocated for 2005, with line-item funding being obtained in 2006.

The resulting legislation provided $35,000 of "direct to lender" loan forgiveness for each year of geriatric medicine or geropsychiatry fellowship completed, 4 loan forgiveness positions per year (more if funding allowed), and an oversight committee with representation from the 2 university fellowship programs (University of South Carolina medicine and Medical University of South Carolina psychiatry), the South Carolina Commission on Higher Education, the South Carolina Medical Association, and a fellow in geriatrics or geropsychiatry.

In January 2006, 10 competitive applications were submitted to the loan forgiveness board. Each application was reviewed and the applicants were interviewed, scored, and ranked. Because of the number and quality of applications received, the board elected to fully fund the highest ranking applicant and divide the remaining funds among the next 7 highest scoring applications.

Each recipient was a US medical graduate. Five recipients were affiliated with an academic geriatrics program and each was in a practice that saw a higher percentage of older adult patients than the award required. Progress reports on these 8 awardees were due in 2007.

While still early in the process, it appears that the loan forgiveness program is having an impact on the state's 2 geriatrics fellowship programs. The number of qualified applicants increased in 2006, compared with previous years; however, there is a significant year-to-year variance that makes conclusions about recruitment premature.

CONCLUSIONS

The critical shortage of fellowship-trained geriatricians will be an issue for decades to come. Measures to correct the financial disincentives to entering geriatrics will be essential, and ultimately, physician reimbursement issues, particularly as they relate to physicians caring for the frailest and most impaired seniors, will need to be updated. The South Carolina Loan Forgiveness Program is one step of what should be a multifaceted approach toward meaningful reform. Other states should consider similar programs and federal legislation.

ACKNOWLEDGMENT

The authors wish to thank Dr. Darryl Wieland for review of the final manuscript.

References

1. US Census Bureau. *US Interim Projections by Age, Sex, Race, and Hispanic Origin*. Washington, DC: US Census Bureau; 2004.

2. Alliance for Aging Research. Medical Never-Never Land: 10 Reasons Why America is Not Ready for the Coming Age Boom. Washington, DC: Alliance for Aging Research; 2002.
3. Butler R, Estrine J, Honig M, et al. *Preparing for an Aging Nation: The Need for Academic Geriatricians*. New York, New York: International Longevity Center-USA, Ltd; 2002.
4. Institute of Medicine. *Aging and Medical Education*. Washington, DC: Institute of Medicine; 1978.
5. Report of the Institute of Medicine: academic geriatrics for the year 2000. Committee on Leadership for Academic Geriatric Medicine. *J Am Geriatr Soc*. 1987;35(8):773-791.
6. Kane R, Solomon D, Beck J, Keeler E. The future need for geriatric manpower in the United States. *N Engl J Med.* 1980; 302(24):1327-1332.
7. Reuben DB, Zwanziger J, Bradley TB, et al. How many physicians will be needed to provide medical care for older persons? Physician manpower needs for the twenty-first century. *J Am Geriatr Soc.* 1993;41(4):444-453.
8. Landefeld CS, Callahan CM, Woolard N. General internal medicine and geriatrics: building a foundation to improve the training of general internists in the care of older adults. *Ann Intern Med.* 2003;139(7):609-614.
9. Warshaw GA, Bragg EJ, Shaull RW. *Geriatric Medicine Training and Practice in the United States at the Beginning of the 21st Century*. Cincinnati, Ohio: The Association of Directors of Geriatrics Academic Programs Longitudinal Study of Training and Practice in Geriatric Medicine; 2002.
10. Warshaw GA, Bragg EJ. The training of geriatricians in the United States: three decades of progress. *J Am Geriatr Soc.* 2003;51(7 Suppl):S338-S345.
11. American Board of Medical Specialties (ABMS); 2005.
12. Bedsine R, Boult C, Brangman S, et al. Caring for older Americans: the future of geriatric medicine. *J Am Geriatr Soc.* 2005; 53(6 Suppl):S245-S256.
13. Kane R. The future history of geriatrics: geriatrics at the crossroads. *J Gerontol A Biol Sci Med Sci.* 2002;57(12):M803-M805.
14. Bragg EJ, Warshaw GA, Arenson C, et al. A national survey of family medicine residency education in geriatric medicine: comparing findings in 2004 to 2001. *Fam Med.* 2006;38(4):258-264.
15. Warshaw GA, Bragg EJ, Thomas DC, et al. Are internal medicine residency programs adequately preparing physicians to care for the baby boomers? A national survey from the Association of Directors of Geriatric Academic Programs Status of Geriatrics Workforce Study. *J Am Geriatr Soc.* 2006;54(10):1603-1609.
16. White House Conference on Aging. Report and Recommendations by the Mini-conference on Geriatric Health Care Workforce Issues. Bethesda, MD: 2005.
17. Leigh JP, Kravitz RL, Schembri M, et al. Physician career satisfaction across specialties. *Arch Intern Med.* 2002;162(14): 1577-1584.
18. Shah U, Aung M, Chan S, Wolf-Klein G. Do geriatricians stay in geriatrics? *Gerontol Geriatr Educ.* 2002;26(1):57-65.
19. Diachun LL, Hillier LM, Stolee P. Interest in geriatric medicine in Canada: how can we secure a next generation of geriatricians? *J Am Geriatr Soc.* 2006;54(3):512-519.
20. Medina-Walpole A, Barker WH, Katz PR, et al. The current state of geriatric medicine: a national survey of fellowship-trained geriatricians, 1990 to 1998. *J Am Geriatr Soc.* 2002; 50(5):949-955.
21. Wesley SC. Enticing students to careers in gerontology: faculty and student perspectives. *Gerontol Geriatr Educ*. 2005; 25(3):13-29.
22. American Geriatric Society, Association of Directors of Geriatric Academic Programs. *Geriatric Medicine: A Clinical Imperative for an Aging Population*. New York, New York: American Geriatric Society; 2005.
23. Elon RD. Reforming the care of our elders: reflections on the role of reimbursement. *J Am Med Dir Assoc.* 2003;4(2):117-120.
24. LaMascus AM, Bernard MA, Barry P, et al. Bridging the workforce gap for our aging society: how to increase and improve knowledge and training. Report of an expert panel. *J Am Geriatr Soc.* 2005;53(2):343-347.
25. O'Neill G, Barry P. Training physicians in geriatric care: responding to critical need. *Public Policy Aging Rep.* 2003; 13(2):17-21.
26. Reuben DB, Bradley TB, Zwanziger J, et al. The critical shortage of geriatrics faculty. *J Am Geriatr Soc.* 1993;41(5):560-569.
27. Weeks WB, Wallace AE. Return on educational investment in geriatrics training. *J Am Geriatr Soc.* 2004;52(11):1940-1945.
28. Reuben DB, Lee M, Katz D, et al. Building academic geriatric capacity: an evaluation of the John A. Hartford Foundation Centers of Excellence initiative. *J Am Geriatr Soc.* 2004;52(8): 1384-1390.
29. Bragg E, Warshaw G. eds. Fellows in geriatric medicine and geriatric psychiatry programs. *Training and Practice Update: Association of Directors of Geriatric Academic Programs Longitudinal Study of Training and Practice in Geriatric Medicine*. 2005;3(2):1-6.
30. Warshaw GA, Bragg EJ, Shaull RW, et al. Geriatric medicine fellowship programs: a national study from the Association of Directors of Geriatric Academic Programs' Longitudinal Study of Training and Practice in Geriatric Medicine. *J Am Geriatr Soc.* 2003;51(7):1023-1030.
31. Brotherton S, Etzel S. Graduate medical education, 2005-2006. *JAMA.* 2006;296(9):1154-1169.
32. Newton DA, Grayson MS. Trends in career choice by US medical school graduates. *JAMA.* 2003;290(9):1179-1182.
33. Gibbons CD, Bondo BE, Kelley L. *Opportunities, Challenges and Choices: Mature Adults Count 2006 State Report*. Columbia, SC: South Carolina Lieutenant Governor's Office on Aging; 2006.
34. Association of American Medical Colleges. *Medical Educational Costs and Student Debt: A Working Group Report to the AAMC Governance*. Available at: http://www.aamc.org/publications. Accessed February 22, 2007.