June 2002



INTERNATIONAL LONGEVITY CENTER-USA

60 East 86th Street New York, NY 10028

212 288 1468 Tel 212 288 3132 Fax info@ilcusa.org www.ilcusa.org

An Affiliate of Mount Sinai School of Medicine

Preparing for an Aging Nation: The Need for Academic Geriatricians

Preface

Robert N. Butler, M.D.

President and CEO
International Longevity Center-USA

As the size of our nation's older population continues to increase, it is vital that our health care workforce receives the necessary education and training in geriatrics—which is the special body of medical knowledge dealing with older people. Unfortunately, this is currently not the case, and as a result older people often receive inadequate or inappropriate health care. In order to improve the health and well-being of older persons in the United States, we must develop a cadre of between 1,400 and 1,450 academic geriatricians, enabling each allopathic and osteopathic medical school in the country to have ten geriatricians on its faculty. This is a minimum. Realistically, some of the larger schools will be able to support more positions, so a total goal of 2,400 academic geriatricians for our nation's medical schools is ideal. These academic geriatricians will ensure that no person graduates from medical school and completes a residency, regardless of specialty, without receiving education and training in geriatrics.

A modest but incremental investment by the federal government averaging less than \$22 million per year would establish at least 1,400 academic geriatricians, and private support could contribute the remainder toward the goal of 2,400. The funds generated by this public/private partnership would ensure the establishment of a foundation of knowledge and leadership sufficient to improve our health care system's capacity to care for an aging population. Such a funding effort by the federal government could be modeled on the wise bipartisan approach Congress took a few years ago with regard to the National Institutes of Health (NIH) funding, although the federal funding involved in this initiative would be much more modest.

A strong commitment by the government to a regular stream of financial support for geriatrics would encourage medical centers to establish or expand programs, enhance their ability to attract funds from private sources, and ultimately produce a sufficient number of academic geriatricians. Given the impending retirement of the baby boom generation, this process should begin as soon as possible. This Issue Brief will highlight the critical need for academic geriatricians and present a realistic proposal to help address the problem.

The Need for Academic Geriatricians

Currently there are about 35 million people 65 and over and this number will roughly double over the next 25 years. Unfortunately, despite this demographic trend most medical students and residents currently receive little if any training in geriatric medicine. There is a critical need to develop a cadre of academic geriatricians to address this situation.

An academic geriatrician is a physician who has the combination of clinical and scientific training to teach geriatrics. On average, a qualified academic geriatrician requires four years of additional education, research, and clinical training after completing an initial residency in family practice, internal medicine, or psychiatry. It has been reported that there are currently fewer than 600 faculty members who list geriatrics as their medical specialty. The ILC estimates that a minimum of about 1,400 to 1,450 academic geriatricians are necessary to prepare the physician workforce for our aging population. This is a modest number out of a total of almost 100,000 medical school faculty members, but it would be sufficient to place academic geriatricians at every medical school, allopathic and osteopathic, and incorporate geriatrics into the entire medical education and training process.

The United States has a total of 125 allopathic medical schools, yet only three have full departments of geriatrics. Moreover, in the academic year 1998–99, only 12 schools included geriatrics as a separate required course in their curriculum, and one-third of medical schools did not even offer it as a separate elective². Several medical schools offer small programs in geriatrics, but this limited status has precluded the subject from receiving the resources and prominence necessary to be mainstreamed into the curriculum. A similar shortage also exists in our 19 schools of osteopathic medicine. This serious shortcoming continues beyond medical school to the residency programs. Medicare's graduate medical education program (GME) helps finance 98,000 residencies

each year, including a one-year fellowship in geriatrics for residents who have completed their initial residency. In 1999, there were less than 500 individuals in this geriatrics fellowship, comprising 0.4 percent of all residencies³.

As a result, very few physicians are well prepared for the particular issues and complexities associated with caring for an older patient, nor are they able to perform an effective geriatric assessment. Older Americans often have three or more medical conditions, both chronic and acute. In addition, they have symptoms that often differ from those of younger persons with the same illness. For example, an older person who has a heart attack may not experience crushing chest pain, but only dizziness and confusion. Or an individual with hypothyroidism may appear to be suffering from dementia. Older people also commonly exhibit responses to medications that differ from those of younger patients, with people 85 and older particularly sensitive to typically prescribed drug dosages. It has been estimated that medication problems may be involved in as many as 17 percent of hospitalizations of older Americans annually, and another study has estimated that drug misuse by older persons costs approximately \$20 billion a year in hospital stays4. In addition to dealing with the unique physical needs of older people, geriatrics also entails attention to care management and coordination, with particular attention paid to social, environmental, and psychological issues.

The legislation establishing the National Institute on Aging did not provide the means to develop academic geriatricians. By contrast, the National Heart Institute was able to support the development of about 16,000 cardiologists during the first 22 years of its existence. This federally-sponsored effort no doubt contributed to the 60 percent reduction in deaths from heart disease. An effort to ensure that academic geriatricians are on the faculty of every U.S. medical school will also improve the health and well-being of older people and ultimately, as mistakes and misdiagnoses are reduced, save our health care system money.

How It Can Be Done

The federal government can address this critical situation by financing a geriatrics faculty development initiative. Currently, a program is operated by the Health Resources and Services Administration (HRSA) called the geriatric academic career award (GACA) that is specifically intended to promote the career development of academic geriatricians. It is very new and very limited, with only 15 award recipients in 2001. However, it serves as a good model for how the federal government can establish a commitment to the development of a cadre of academic geriatricians.

Table 1 represents a revised algorithm by the ILC to summarize the development and financing of roughly 1,400 academic geriatricians over 20 years. This program would attract individuals who complete the one-year Medicare GME fellowship in geriatrics and choose to pursue a career in academic geriatrics instead of going into private practice. The algorithm is a simplified approach intended to provide a basic blueprint for a geriatric faculty development effort.

According to the algorithm's projections, initially about 35 individuals would enter the program each year for the first five years. This is based on an estimate that about 35 medical centers currently have the resources to train individuals as academic geriatricians. (Note: One simplification here is that initially one person would enter one of the 35 centers each year. Realistically, in any given year some institutions would attract two or three candidates, and others would not attract any. Over time, the simplifying assumption is that there would be on average one new candidate at each of the 35 schools each year.) As the initiative develops and begins to produce academic geriatricians, additional schools will be able to establish their own programs and attract new candidates, eventually building up to 145 new candidates per year, based on the assumption that every medical school in the United States will have a program or department in geriatrics significant

enough to supply the proper training to an individual studying to be an academic geriatrician. After 20 years, the United States will have produced about 1,400 academic geriatricians at an average annual cost of about \$22 million. In the early years, the initiative would cost less than \$10 million per year!

Table 1

Year	New candidates	Number completing 3 years (cumulative) (16% attrition)	Number in program each year (16% attrition)	Cost per year
1	35	0	35	\$2,625,000
2	35	0	64	\$4,830,000
3	35	29	94	\$7,035,000
4	35	59	94	\$7,045,500
5	35	89	94	\$7,045,500
6	70	118	129	\$10,315,200
7	70	148	158	\$12,678,400
8	70	207	188	\$15,030,400
9	70	266	188	\$15,030,400
10	70	325	188	\$15,030,400
11	140	384	258	\$21,919,800
12	140	444	317	\$26,941,600
13	140	562	376	\$31,939,600
14	140	680	376	\$31,939,600
15	140	799	376	\$31,939,600
16	145	917	381	\$34,268,400
17	145	1,035	385	\$34,648,200
18	145	1,158	389	\$35,026,200
19	145	1,280	389	\$35,026,200
20	145	1,403	389	\$35,026,200

Total number of qualified individuals produced after 20 years: **1,403** Total investment per year on average: **\$22 million**

The funding for each candidate would be similar to the NIH's K23 awards, which support the career development of clinicians focused on patient-oriented research. An amount of \$75,000 would be granted annually to support each individual position. (Note: The current GACA award is about \$50,000.) This amount of \$75,000 is increased modestly in the algorithm to adjust for inflation, so that after five years the awards are \$80,000 per year; after 10 years, they are \$85,000, and so on. The calculations are based on each trainee completing three years of training, which is the minimum additional training needed to become an academic geriatrician after

completing the Medicare GME fellowship. The algorithm also includes an annual attrition rate of 16 percent, which is not evidence-based but is considered a reminder that some attrition is expected in any training program. The attrition can occur in any year of training, but, again for the sake of simplification, it is assumed in the calculations to occur in the first year.

In addition to the federal contribution to the initiative, private philanthropy can support additional research and training fellowships as well as contribute to the infrastructure needs of institutions, such as endowing chairs, building labs and facilities, and developing curriculums. A coordinated public/private effort is necessary to achieve the overall goal of 2,400 academic geriatricians, thereby ensuring that geriatrics is mainstreamed into the medical education and training process.

Obstacles

One reason for the shortage of both academic geriatricians and practicing geriatricians is the misperception that geriatrics is a specialty dealing in dementia, deterioration, and depression. The reality, however, is that older people are a dynamic and varied population, with remarkable coping abilities. Students who are brought "across the transom" to appreciate the rewards of geriatrics, such as how even modest interventions can enhance the quality of their patients' lives, are more likely to make the decision to enter the field. An incremental approach to building up a cadre of academic geriatricians will provide the mentors and role models needed to attract medical students, which will further expand the field and help our nation achieve the goal of 2,400 academic geriatricians. Of course, other factors must be taken into consideration, including adequate reimbursement to physicians for caring for older people and ensuring that current practicing physicians receive continuing medical education in geriatrics. But developing a cadre of academic geriatricians will ensure the creation of the necessary human capital to build the field.

A bipartisan commitment to incremental geriatrics annual funding increases for geriatrics is essential. It will provide a relative degree of funding stability, which is essential to expanding geriatric-oriented operations and recruiting personnel. Such a commitment could also be used to leverage additional private funds to complement the government funding.

This financing plan could be modeled on the bipartisan pledge that Congress made to double the NIH funding over 5 years, which has been very successful. The NIH funding increased from \$13.6 billion in 1998 to a proposed level of \$27.3 billion for the 2003 budget. The funding for geriatrics training would be much smaller, in the mere millions as indicated by the algorithm, but the benefits will be vast.

The greatest challenge in the creation of a geriatrics faculty development initiative is funding. Both public and private efforts are needed. Many foundations, such as the Brookdale Foundation, the John A. Hartford Foundation, and the Donald W. Reynolds Foundation, have made significant financial contributions to developing the field of geriatrics for physicians and other health care providers. However, a commitment by the federal government is necessary to fully meet our nation's needs. The governmentsupported geriatrics training programs that do exist, primarily the programs at HRSA and at the Department of Veterans Affairs, are very modest. There are signs that this may be changing. Funding for the HRSA geriatrics programs increased from \$12.4 million to \$20.4 million in 2002. However, this figure includes two other programs, Geriatric Education Centers and Geriatrics Fellowships for practicing physicians and other health providers, so only about \$2 million of this funding will be devoted to the development of academic geriatrics. As indicated by the algorithm, training academic geriatricians will require more than this to meet the minimum goal of 1,400 academic geriatricians. This funding should not be to the detriment of the other two valuable programs operated by HRSA, which are also vital to enhancing geriatrics training for physicians, nurses, social workers, and other health care providers. In fact, those two programs should also receive significant funding increases, but this Issue Brief is focused on the need for academic geriatricians.

Conclusion

Given the aging of the baby boom generation, the U.S. must prepare with all due haste to address the critical shortage of academic geriatricians. The algorithm presented in this Issue Brief is intended to highlight the modest incremental federal funding required to develop a cadre of academic geriatricians. Such an initiative would ultimately contribute to the goal of improving the health and wellbeing of all older people.

James Nyberg

Director of Government Relations

Charlotte Muller, Ph.D. Co-Director of Research

- 1 Association of American Medical Colleges (AAMC). Testimony before the U.S. Senate Special Committee on Aging, May 20th 1998.
- ${\bf 2}\ {\bf AAMC}.\ Curriculum\ Directory,\ 1999.$
- 3 American Medical Association's Fellowship and Residency Electronic Interactive Database (FREIDA Online), www.ama-assn.org/ama/pub/category/2997.html.
- 4 General Accounting Office. Prescription Drugs and the Elderly 95-152, (July 1995).

The International Longevity Center–USA (ILC–USA) is a not-for-profit, nonpartisan research, education and policy organization whose mission is to help individuals and societies address longevity and population aging in positive and productive ways, and highlight older people's productivity and contributions to their families and society as a whole.

The organization is part of a multinational research and education consortium, which includes centers in the U.S., Japan, Great Britain, France and the Dominican Republic. These centers work both autonomously and collaboratively to study how greater life expectancy and increased proportions of older people impact nations around the world.

Other ILC Issue Briefs include:

Social Security: Investment in Family Protection
Old and Poor in America
Lifelong Learning in Norway: An Experiment in Progress

INTERNATIONAL LONGEVITY CENTER-USA

Board of Directors

Laurance S. Rockefeller, Honorary Chair

Robert N. Butler, M.D.

Mary Carswell

Christine Cassel, M.D.

Everette E. Dennis, Ph.D.

Susan Dryfoos

Lloyd Frank

Annie Glenn

Senator John Glenn

Lawrence K. Grossman

Raymond L. Handlan

Robert Hormats

Tasneem Ismailji, M.D.

Rose Kleiner, (1925-2001)

Linda P. Lambert

Max Link, Ph.D., Chair

Evelyn Stefansson Nef

Joseph E. Smith

Alfred Stern

Catharine R. Stimpson, Ph.D.

James H. Stone

William D. Zabel, Esq.

Mel Zuckerman

John F. Zweig

ILC INTERNATIONAL CENTERS

Directors

Shigeo Morioko

ILC-Japan

Francoise Forette, M.D.

ILC-France

Baroness Sally Greengross

ILC-United Kingdom

Rosy Pereyra Ariza, M.D.

ILC-Dominican Republic