Introduction

The United States population is aging rapidly. It is estimated that the number of people age 85 and over will have doubled during the last 15 years of the 20th century to more than five million. These people will be subject to acute and chronic ailments, in addition to the physical, behavioral and social changes associated with aging. In 1983, the 12% of the U.S. population over the age of 65 used 25% of medications and accounted for more than 33% of physicians' time and 40% of acute hospital admissions (1). These figures indicate that the elderly population has an even greater impact on the use of health care and social resources than the absolute size of this group would suggest; this effect will become more pronounced in coming decades.

The special health care needs of our aging population, along with new knowledge and the increased cost and use of technology, have resulted in an urgent requirement for improved medical education, practice, research and health policy development in geriatrics. The comprehensive and continuing medical care of an elderly patient should be and most often is provided by an internist or other appropriately trained primary-care physician. In 1985, persons aged 65 and over accounted for almost 40% of ambulatory care visits to internists, as compared with 20% of visits to all medical and surgical specialists (2). For these reasons, the American College of Physicians (ACP), a medical specialty society of more than 63,000 doctors of internal medicine, is exploring ways to improve graduate education in geriatrics during the internal medicine residency.

In 1981, a geriatric policy paper by ACP and other members of the Federated Council of Internal Medicine (FCIM) recommended that "residencies in internal medicine should include an intensive supervised instructional program in geriatric medicine, either in block time or longitudinal, based in appropriate clinical training sites, especially ambulatory care settings." (3) ACP continues to support strongly the 1981 paper, and is increasingly concerned that these recommendations have not been adequately implemented; after eight years, sufficient faculty or facilities to meet the requirements for geriatric training still do not exist.

Meanwhile, medical schools have increased somewhat their teaching of geriatrics and gerontology, partially in response to the
guidelines published by the Association of American Medical Colleges in 1983 (4). Post-residency geriatric medicine fellowships nearly tripled in number between 1980 and 1987 (5), and an accreditation process for geriatric fellowship has been implemented by the Accreditation Council for Graduate Medical Education (ACGME). The first examination for certification of added qualifications in geriatric medicine was administered in April 1988 to more than 4,200 board-certified internal medicine and family medicine practitioners. However, only 56% of the examinees passed. According to the American Board of Internal Medicine, "the examination content on which Diplomates did least well was clearly within the purview of geriatric medicine (iatrogenic problems, social services, rehabilitation medicine, etc.)" (6). Less than 10% of those examined had taken formal postgraduate training in geriatric medicine; of this subgroup, 92% passed. These figures support the view that advances so far achieved in this educational field are insufficient: In medical school and residency, not enough teaching and experience is being provided, while at the fellowship and practicing physician levels, excellent training and high competence have been obtained, but only by a numerically inadequate pool of practitioners.

Although ACP recognizes that problems exist at all levels of geriatric training, and across the boundaries of medical and surgical teaching programs, this paper will focus largely on the internal medicine residency. Present internal medicine Residency Review Committee (RRC-IM) requirements include the following:

"Geriatric Medicine

Resident experience must include formal teaching and regular supervised experience in geriatric medicine. When available, assignments to geriatric services (in-patient, nursing home, home-based or ambulatory) are desirable."

"The Patient Population

.... There should be an adequate number of patients of both sexes and a spectrum of socioeconomic status and age, including (....) geriatric (patients)." (7)

Although these geriatric training specifications are more extensive than those in previous versions of the RRC-IM requirements, they may need additional strengthening. However, as alluded to above, shortages of qualified faculty and well-supervised ambulatory and long-term care training sites present a major obstacle in changing the programs to fulfill any such revised requirements.

The ACP Health and Public Policy Committee's Subcommittee on Aging is investigating these and related issues in geriatrics. In this paper, the College will report on recent progress in geriatric training and discuss other potential improvements. The paper's appendix gives information on short-term continuing medical education options suggested by ACP for immediate geriatric faculty
development. Subsequent ACP efforts will discuss other practical solutions for the problems identified here, such as other aspects of faculty development, and the planning and implementation of long-term care and community care training affiliations.

Basic Elements of Internal Medicine Residency Training In Geriatrics

A number of "core" geriatrics curricula have been developed for medical schools, internal medicine and family practice residencies, and geriatric fellowships (5, 8-11). Most of these curricula list knowledge, skills and attitudes, ranking the components in order of importance as perceived by leading clinicians and educators. Several studies combine and compare the work of previous researchers and educators (5, 8)--an approach that should be extended, as it can lead to a wider consensus among faculty, practitioners and researchers on the minimum acceptable content for each type of geriatric training. The RRC-IM could draw more extensively on such work to strengthen its requirements.

Much of the knowledge and many of the skills needed for care of the elderly are fundamental to the primary care of patients of all ages; yet such elements are underemphasized in residency training, partially because of the pressure of other issues in acute care situations. These elements include:

- Communication and interpersonal skills;
- Comprehensive health assessment, including the physical, mental, psychosocial, functional and environmental spheres;
- Ethical and legal issues of health care;
- Management of patients in long-term care and community settings;
- Caregiver and family relationships and support;
- Appropriate use of multiple professionals in health care teams.

Additionally, content and skills more specifically related to health care of the elderly include (but are not limited to):

- Physiologic and structural changes of aging;
- Pharmacologic alterations associated with aging and the appropriate use of medications;
- Mental health aspects of aging, including depression and dementia, along with emotional reactions to aging, disability, social isolation and bereavement;
- Preventive medicine for the elderly, including age appropriate health maintenance, screening and the prevention of iatrogenic disorders;
- Diseases that are especially common and may have different presentations in the elderly, especially cardiovascular, infectious, neoplastic, metabolic, musculoskeletal and neurologic;
- Geriatric syndromes such as cognitive impairment, falls, incontinence and decubiti;
- Perioperative assessment and management of the elderly surgical patient.
Training sites must not be limited to the acute-care hospital and its associated ambulatory care clinics, although increased emphasis on geriatric medicine is needed in these settings. Programs should provide adequate support for the development of well-supervised affiliations so that residents also will participate in institutional long-term care, as for example in a nursing home. Equal importance must be given to providing supervised training in community settings for ambulatory care, home care, day care, or life care. ACP and others (3) have noted that exposure to healthy elderly persons as part of the clinical spectrum helps trainees learn to distinguish the normal physiological changes of aging from disease processes, to recognize and avoid iatrogenic illness, and to gain experience in preventive medicine, in addition to identifying and addressing stereotypes of aging and providing a better understanding of the patient as a functioning person.

The importance of developing humanistic qualities and attitudes of cooperation with other health professionals is widely acknowledged by educational leaders in both internal medicine and family practice, and has been emphasized by curriculum researchers in geriatrics (5, 8-12). Along with conventional medical abilities, specific interpersonal skills should be taught and indeed are rated highly in the consensus curriculum lists cited above. The provision of appropriate role models at all levels of medical training also is critical. However, the development of humanistic attitudes requires that the overall quality and organization of training is good enough to help the physician develop an appropriate medical knowledge base. Adequate diagnostic and therapeutic knowledge and skills contribute to the confidence with which house staff perform their duties, thus helping to prevent formation of cynical or fatalistic attitudes, and allowing consideration of humanistic issues.

In addition, the trainee should be part of an interdisciplinary geriatric team; this team should include, at a minimum, physicians, nurses and social workers. True collaboration will allow the trainee to learn from individual members of the team and understand its process and function. The training institution as a whole should stimulate such horizontal integration so that trainees and staff will value cooperation and coordination of services between medical, surgical and allied health professionals in all types of patient care. In this regard, the interdisciplinary team training in geriatrics (ITTG) established by the Veterans Administration, which has met with considerable success, can serve as an example.

The geriatric component of internal medicine residency not only provides much-needed training in the care of elderly patients, but also is ideal for gaining experience in other important aspects of internal medicine such as long-term care, ambulatory care, medical rehabilitation, and care provided in non-traditional settings such as the home. Appropriately designed mandatory geriatrics rotations will provide model settings for fulfilling present RRC-IM specifications, such as the requirement that residents
spend at least 25% of their time in ambulatory care. Indeed, geriatric patients, with their multiple problems and complex care issues, give training programs the opportunity to emphasize cultural, socioeconomic, ethical and behavioral aspects of care, as well as the social impact of illness, family relationships, and humane treatment of patients.

Geriatric training for house officers should be a high priority, on its own merit. Practically speaking, however, if internal medicine residencies are to incorporate geriatrics while preserving essential elements in the busy training experience and introducing increased ambulatory care training and other activities newly-required by the RRC-IM, a thorough appreciation of the interrelationship between geriatrics and these other elements is necessary. Thoughtful and careful reorganization of the curriculum may be time consuming but ultimately will improve both patient care and the training experience.

Importance of Improved Geriatric Training for Medical Practice

A number of studies have addressed the United States' projected numerical needs for geriatric practitioners, teachers and researchers in the coming decades (as summarized by Vivell, Solomon & Beck) (5). Investigators agree that the present rate of faculty development is insufficient for training physicians to meet expected geriatric patient care requirements.

Also, newer estimates of the growth rate for the nation's elderly population, along with changing practice patterns resulting in growing demand for geriatricians, have led to upward revisions in these physician manpower projections. For example, researchers who said in 1980 that about 8,000 full-time-equivalent (FTE) primary care physicians would be needed by 1990 to care for persons over 75 years of age have more recently stated that as many as 20,000 FTEs with varying degrees of expertise in geriatrics soon will be needed, of whom 13,000 would be internists and family physicians (5).

Specialized geriatric training--and recognition thereof--can be important in stimulating excellence in teaching, research and practice. The recently instituted examination leading to certification of added qualifications in geriatric medicine is one valid way to encourage and verify high competence among physicians of various specialties who care for elderly patients. However, basic competence in geriatric care must be featured more strongly in continuing medical education for all medical and surgical practitioners, and should continue to be assessed in board-certification examinations. (The American Board of Internal Medicine (ABIM) reports that, on the 1987 and 1988 ABIM Certifying Examinations in Internal Medicine, respectively, 16% and 12% of the questions were classified as geriatric medicine. (6))

Nurses, social workers and other health professionals likewise must gain additional structured educational experience. The
establishment of strong academic units in geriatrics will contribute to the education of other health professionals through cooperative efforts and increased availability of teaching staff.

Development and Current Status of Geriatric Training

The past decade has seen increases in the number of medical schools, residencies and fellowships with curricula and faculty for geriatric instruction, but these increases are by no means adequate. As noted earlier, ACP believes that internal medicine Residency Review Committee requirements for geriatrics may need strengthening; additional resources also are essential. Stronger requirements alone will not eliminate the faculty shortages and other obstacles noted, but will provide a strong incentive for training programs to develop and implement solutions within a reasonable time.

In 1976, only 15 U.S. medical schools had any type of undergraduate geriatric program (13). By 1986, Schneider and Williams reported that 75% of U.S. medical schools offered elective courses in geriatrics, but only about 4% of medical students took such courses (14). During these years, the small minority of undergraduate geriatric courses that were required, rather than elective, did not significantly increase (15).

The number of geriatric medicine and geropsychiatry fellowship programs has increased dramatically, from 36 in 1980 to 103 in 1987, and the number of positions and graduates likewise has risen. However, the number of geriatric fellowship graduates remains far below the number in medical specialties such as gastroenterology, cardiology and pulmonary diseases, and does not meet the need for academic or clinical practitioners. As of June 1986, only about 450 physicians had taken fellowship training in geriatric medicine or geropsychiatry. Furthermore, factors such as the newness and unproven quality of many of the existing programs and the low number of faculty and trainee positions available in some fellowships must temper enthusiasm about these increases (4). Indeed, as of May 1989, only 43 geriatric fellowship programs in internal medicine and 14 in family practice have been accredited by ACGME, although not all existing programs applied for or were eligible for accreditation (16).

Recent increases in the number of internal medicine residency programs with organized experience in geriatrics likewise must be placed in perspective. The number of established academic units in geriatrics available to internal medicine and family practice programs rose from approximately 28 in 1979 to approximately 40 in 1984; during this time, the reported number of such units providing mandatory geriatric rotations to half or more of a program's residents doubled, from 21% to 43%. However, this 43% represented, in raw numbers, only 13 mandatory rotations identified by those 30 programs that reported (8). In 1984 there were more than 440 residency programs in internal medicine and more than 350 in family practice in the United States. In the
absence of an established academic unit, organized clinical geriatric instruction is uncommon (5). The proportion of residency training programs with mandatory geriatric rotations therefore can be estimated for 1984 as less than two percent.

In a 1988 random sample survey by Reuben, Fink, Vivell, Hirsch and Beck (in press) of one third of the nation's 798 internal medicine and family practice residency programs, much additional growth in training availability was noted, though faculty shortages and other significant obstacles still were present. Reuben et al found geriatric curricula in place at 80% of the family practice programs surveyed, but in only 36% of internal medicine programs. They attribute this difference in part to formal geriatric curriculum requirements in family practice (17).

Compared to earlier findings, an increased proportion (two-thirds) of the geriatric rotations identified in residency curricula for 1988 were found to be required as opposed to elective. These required rotations averaged four to five weeks in duration with 75-80% of the curriculum time devoted to clinical experience. However, nursing homes remained the predominant non-traditional clinical training site (available in more than half of internal medicine programs and almost all family practice programs). Geriatric evaluation units, geropsychiatry wards and geriatric clinics still were in short supply.

Insufficient faculty was cited most frequently as a major obstacle to geriatric curriculum implementation, except in family practice programs with a curriculum in place; these programs cited a generally full curriculum as the major obstacle. In the total sample, a full curriculum was cited second most frequently, followed by resident and faculty resistance, lack of training sites and inadequate patient census (17).

The past decade's continued growth in various levels of geriatric training is somewhat encouraging, but the data confirm the need for much additional expansion. In assessing obstacles to such growth, the research cited above highlights the importance of faculty training, increasing the number of academic units in geriatrics, and development of a required curriculum and of training sites, especially for ambulatory and extended care.

Support for Improved Geriatric Care, Teaching and Research

The large and rising proportion of the U.S. gross national product spent on health care is receiving considerable public and legislative attention. To control spending, health care increasingly is weighed against other national concerns. At the same time, within hospitals and medical schools, funding competition between and within departments may result from a lack of sufficient funding for all possible programs and projects.

If geriatric care, teaching and research are to be developed successfully, programs must be well-planned before they become
operational. Geriatric faculty should operate within an identifiable academic unit (for example, a division, section, program or center) and must possess appropriate credentials, preferably certificates of added qualifications in geriatric medicine (or the equivalent). The geriatric unit must not only have adequate funding, but also a core of faculty members (not necessarily limited to internists) who are both well qualified and respected by the medical community. One or more such dedicated physicians, with adequate financial support, may be able to develop programs and resources and recruit additional faculty.

Research opportunities also are essential to attract and maintain faculty, attract high-quality residency and fellowship applicants, and generate momentum for growth. However, patient care considerations must continue to be an important organizing principle for any valid clinical training program.

One way to increase core geriatrics faculty numbers is through career training and retraining of staff internists. In addition to the core faculty, internal medicine subspecialists and other established academic and clinical health practitioners must be encouraged to teach geriatrics as it applies to their areas of expertise and, indeed, to avail themselves of existing high-quality continuing medical education offerings that will enhance their knowledge, skills, and sensitivities and prepare them for such teaching activities (see appendix). Participation of these individuals now is especially important because the shortage of full-time geriatric academicians and clinicians can only be repaired over time. Courtesy appointments for qualified community practitioners on the faculty of geriatric units may be utilized, and more integral and innovative approaches to development of interdisciplinary geriatric programs should be explored more widely.

Faculty development may require additional funding for graduate medical education from traditional sources, but new sources and mechanisms will also have to be explored. ACP's 1985 policy paper on "Financing Graduate Medical Education" presents a rationale for this monetary support: because graduate medical education serves the public good and is closely linked with patient care, it should receive both public financial support and private support through payments for patient care services. Graduate medical education funding must be considered in the light of physician manpower projections and must be a part of discussion of issues of physician reimbursement (18). ACP repeatedly has asserted that the cognitive activities of internists should be recognized as discrete and vital elements of patient care (19-22); such recognition is overdue and would encourage internists to teach the necessary skills more extensively. Improved procedural coding and better reimbursement of non-procedural but time-consuming aspects of care for the elderly, like counseling of family care-givers, repeated visits by the physician to long-term care facilities, etc., would stimulate the provision of geriatric care by general internists, subspecialists and other physicians.
More physicians then would seek to obtain the skills required to provide this care; this would increase the demand for geriatric training and expand the need for and supply of teaching faculty. Particularly, these issues should be considered in the on-going development of the Resource-Based Relative Value Scale.

At present, the College reaffirms its support for provisions in regulations implementing the 1986 Consolidated Omnibus Budget Reconciliation Act (COBRA) that authorize 100-percent funding of medical education in geriatrics for post-graduate years four and five. This provision is vital if geriatric programs are to continue training beyond the year following primary board eligibility, when federal funding otherwise would be reduced to 50 percent. In some states, additional funding might be made available through state legislatures, and through nursing homes, which are aware of the value of clinical experience for internal medicine residents, and which see these residents as a source of future staff members.

Conclusion

In summary, the American College of Physicians continues to support intensive supervised instruction in geriatrics for all internal medicine residents as a means of providing important experience in caring for elderly patients as well as in many aspects of internal medicine practice—such as long-term care, ambulatory care, medical rehabilitation, and care provided in non-traditional settings—that also are important for other patient populations. In the development of such geriatric training, ACP perceives that additional research and action are most needed in the following areas:

1. Stimulation of faculty development in geriatrics with increases in the number of well-organized academic units and encouragement of internal medicine subspecialists and other physicians and health professionals to develop expertise and provide instruction in the special problems and needs of their elderly patients;

2. Development of program affiliations with multiple training sites, notably long-term care and community facilities, with high-quality supervision and coordination of training between such sites and the parent institution;

3. Pursuit of financial support for geriatric training in internal medicine residencies from within the health care industry, government, and the private sector.

4. Continued consensus development of a "core" geriatric curriculum for internal medicine house staff, and careful reorganization of the overall internal medicine residency curriculum to adequately incorporate geriatrics while preserving the many other essential elements in the crowded training experience;
However, these enhancements will not necessarily occur even if their importance becomes more widely recognized. The relatively small increases in geriatric training during the past decade suggest that incorporation of geriatrics in the internal medicine residency must be mandated more explicitly. Eventual development of sufficiently strong requirements and a firm but realistic timeline by the Residency Review Committee in Internal Medicine therefore is a significant priority. Such changes will stimulate training programs to accelerate efforts to develop the necessary resources.

In addition to calling for these reforms, the American College of Physicians will continue to provide continuing medical education in geriatrics; will help program directors, department chairmen and other educators learn how the nation's successful geriatric programs have solved the problems that slow faculty and training-site development; and will attempt to devise solutions to remaining problems.

Although internal medicine residency training in geriatrics has progressed in the past decade, much more development is needed to provide quality patient care for the elderly in response to the challenges medicine and society face as we approach the twenty-first century.
REFERENCES:


6) Personal communication from John Benson Jr., MD, MACP, President, American Board of Internal Medicine, April 5, 1989.

7) Accreditation Council for Graduate Medical Education, Residency Review Committee--Internal Medicine. Special requirements for residency training programs in internal medicine. Approved September 27, 1988, Implementation date October 1, 1989.


16) Personal communication from James R. Weinlader, MD, Executive Secretary, Residency Review Committee for Internal Medicine, Accreditation Council for Graduate Medical Education, Chicago, June 1, 1989 phone call.

17) Personal communication from John C. Beck, MD, MACP, Division of Geriatric Medicine, University of California at Los Angeles, January 5, 1989.


19) Statement to the Physician Payment Review Commission by John R. Ball, MD, JD, FACP, Executive Vice President, American College of Physicians, May 27, 1987.


21) Statement for the record to the Committee on Finance, United States Senate, by the American College of Physicians, July 9, 1987.

APPENDIX:

Continuing Medical Education Offerings:
Suggestions for Immediate Geriatric Faculty Development

In 1990, there will be a number of brief board review courses offering comprehensive coverage of geriatric medicine. The UCLA/ACP/AGS four-day comprehensive review is offered annually in January, as is the three-day Harvard course in the spring. Johns Hopkins also offers a course each winter (three to four days).

For CME-certified self-review, the Geriatrics Review Syllabus, a core curriculum endorsed by AGS, ACP and AAFP, will be offered by the AGS beginning in Spring 1989. The program booklets cover general principles of aging, geriatric syndromes and common geriatric diseases and disorders—with text, multiple-choice and true/false questions, detailed index and annotated bibliographies.

For information on all the above activities, contact Manager of Meetings and CME, American Geriatrics Society, 770 Lexington Avenue, Suite 400, New York, N.Y. 10021, (212) 308-1414.

The Bureau of Health Professions' 33 Geriatric Education Centers (GECs) offer a wide range of geriatric faculty training. Continuing education workshops, lectures, seminars, audio-visual materials, etc., are available for physicians and dentists. Those health professionals who are able to spend 40 hours or more in GEC geriatric training are designated separately as "enrollees."

For information, contact Geriatrics Coordinator, Division of Associated and Dental Health Professions, Bureau of Health Professions, Room 8-103, Parklawn Building, 5600 Fishers Lane, Rockville, Md., 20857, (301) 443-6887.

The Bureau of Health Professions also funds a program of grants for faculty training in geriatric medicine and dentistry. These entail one-year retraining curricula or one/two-year fellowships now in place at 23 institutions including Harvard and UCLA. Instruction in clinical, administrative, research and teaching skills is given. (It is not known whether new applications will be taken for the coming fiscal year. Program Authorization: Section 789(e), Title VII, Public Health Services Act.)

For information, contact Division of Medicine, Bureau of Health Professions, Primary Care Medical Education Branch, Parklawn Building, 5600 Fishers Lane, Rockville, Md., 20857, (301) 443-3614.

A number of medical institutions, notably those in the VA system, offer sabbatical programs that can be used to take advantage of the above retraining activities. VA sabbaticals are six months at full pay, or 12 months at half pay, per seven years employment.

For information about VA sabbaticals, contact the VA Office of Academic Affairs, (202) 233-5093.