A National Health Work Force Policy
American College of Physicians*

This position paper highlights the need for a national policy for the health work force in general and supports the creation of a national commission to better coordinate the supply and distribution of health care workers to meet the nation's health care needs. It acknowledges that although there are no definitive data on the optimal mix of physicians, the nation should at least set a preliminary goal of achieving a 50/50 balance between specialists and generalists. Previous efforts to reverse the trend of decreasing numbers of medical students choosing careers in primary care have failed. A combination of legislative, regulatory, and voluntary incentives is now required.

A national commission should be established to help develop and coordinate federal work force policies for the health professions. It would set targets for the aggregate numbers of physicians by specialty and would allocate residency and fellowship training positions to match future physician supply with requirements. The American College of Physicians emphasizes that the commission should be structured to include members, including physicians, who are knowledgeable about graduate medical education and that it should be insulated from political considerations as much as possible. Controlling the number of residency and fellowship training positions among specialties and linking total postgraduate year-1 positions to the output of U.S. medical schools would substantially affect redirecting the future supply of physicians.

The College offers eight principles for allocating postgraduate training positions. Quality should be the strongest determinant. Local needs and minority representation must also be considered. Service needs should not dictate the number of training positions, but special arrangements are necessary to allow public hospitals in major urban centers to reduce their dependence on housestaff for meeting patient service needs. The roles and number of nonphysician health care providers must be considered. Private sector accreditation bodies such as the Accreditation Council for Graduate Medical Education should recommend allocations of training positions based on the quality of training programs. Allocation decisions should be made in advance so that disruptions for programs and residents are minimized. The allocation process, including the national work force commission, should be subject to external review.

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The current mix of incentives, public policies, and medical education and training opportunities have resulted in an imbalance in the number of specialty and generalist physicians. In most industrialized countries, at least 50% of physicians are engaged in primary care compared with only 32% in the United States, where 68% of physicians are specialists and subspecialists (1). Recent reports and recommendations concerning the health professions work force generally agree that the United States would be better served by, and should seek to attain, a more even balance among generalists and specialists (2–5). There appears to be a growing national consensus that at least 50% of physicians should be generalists (5–12).

Overall imbalances have been recognized for nearly 20 years. However, little progress has been made in reducing the growing aggregate number of physicians or in better matching the supply and distribution of physicians to meet national needs (13–15).

In passing the Health Professions Education Assistance Act of 1976, Congress declared that there was no longer a shortage of physicians in the United States. Immigration preferences for international medical graduates (then called foreign medical graduates) were replaced with more restrictive policies, and other federal policies to enhance the production of new physicians (such as capital grants for the construction of new medical schools) were curtailed or eliminated. In 1980, the Graduate Medical Education National Advisory Committee advised Congress that there was a growing surplus supply of physicians over the number required to meet the nation's health care needs. It projected a net excess of 70,000 physicians by 1990 and 140,000 by the year 2000 (16).

The Graduate Medical Education National Advisory Committee also identified major problems in the geographic and specialty distribution of physicians and called for increased efforts to improve minority representation within the physician work force. Subsequent changes in federal, state, and local public policy and voluntary efforts within the medical profession have moderated these trends but have failed to reverse them. People in medically underserved areas continue to have difficulty obtaining physician services, particularly in inner-city and rural areas. Little progress has been made in improving the racial and ethnic composition of the physician work force since the mid-1970s. The persistent imbalances in the numbers, types, minority representation, and geographic distribution of physicians within the United States will remain intractable and could become much more pronounced unless bold action is taken.

The American College of Physicians has long favored voluntary efforts to reduce medical school enrollments as a way to reduce the aggregate supply. In 1987, the College recommended that all allopathic and osteopathic medical schools participate in a national initiative to reduce the class size of students entering medical school by
6% to 12% by 1992 (lower than 1986–87 levels) (17). However, medical school enrollments have remained relatively constant since the early 1980s (18).

Demand for primary care services will be accelerated by the enactment of a universal health care plan that could extend access to 37 million people currently without any insurance and to approximately 50 million additional people with inadequate insurance for major hospital and medical expenses (19). Yet, fewer than 15% of graduating medical students today are planning careers in any of the three primary care specialties (general internal medicine, 3.2%; family practice, 9%; and general pediatrics, 2.4%) (20). Survey data for 1993 graduates indicate a slight improvement, with 19.3% showing an interest in primary care (unpublished data from the Association of American Medical Colleges Annual Medical Student Graduation Questionnaire). Except for this 1 year, the trend over the past decade has been steadily downward from the 1982 level of 36.1% of medical graduates planning careers in primary care.

Decreasing interest among new physicians in careers as generalists threatens the nation’s ability to effectively and efficiently meet future requirements for medical care. Comparing the current mix of physicians, in which 68% are specialists and only 32% are generalists, with what would be needed to achieve a 50/50 balance indicates a shortage in 1993 of 100,000 generalists and an excess of 100,000 specialists and subspecialists (21). Growth of organized health care delivery systems and increased emphasis on managed care are expected to further increase the demand for generalist physicians. Classic health maintenance organization staffing patterns might serve as a reasonable reference standard for a health system that wants to control costs and maintain quality. If the physician work force followed the managed care model of 65% generalists and only 35% specialists and subspecialists, the United States would require 200,000 more generalist physicians (21).

To address these problems, the nation must develop strategies for both the short term and the long term. Improving the medical practice environment for physicians who provide primary care services will be the most important way to increase the attractiveness of careers as generalists. Enhancing reimbursement for primary care services, decreasing administrative and regulatory burdens, and addressing other practice-related factors must be given high priority to reverse the trend away from careers in primary care. The entire spectrum of medical education—undergraduate, graduate, and continuing medical education and training—may also need serious reform.

Some progress is already being made, at least in some areas of the country where recruitment competition among managed care plans has begun to increase compensation for generalist physicians. Nevertheless, current competitive forces should not be allowed to dictate the number and mix of physicians over the long term. Planning is needed on a national basis to complement market forces to help produce earlier shifts in the number and distribution of training programs. Further research on determining the effectiveness of various medical interventions and public education regarding the use of health professionals and facilities could also help to moderate patient demand for unnecessary services.

Because of the severity and tenacity of the problems involved in meeting the nation’s health work force needs, a combination of legislative, regulatory, and voluntary incentives is required (22). Changing the proportion of residents entering primary care is essential. However, because of the extensive length of medical education (4 years of college, 4 years of medical school, and 3 or more years of postgraduate residency and fellowship training) and the extent of the existing imbalance, this approach will not change the specialty mix in the near future. According to recent estimates, if 50% of the graduates of residency programs entered primary care beginning in 1993, it would take until 2040 before the physician work force would achieve a 50/50 balance between generalists and specialists and subspecialists (27). Even if every graduate entered primary care, the desired balance would still not be achieved until 2004. More immediate reconfiguration of the nation’s production of physicians is required.

The problem of assuring an appropriate balance among specialty and generalist physicians is not simple. Many internists and specialties in other medical and surgical fields, also appropriately provide primary care services to their patients (for example, oncologists, cardiologists, gastroenterologists, pulmonologists, obstetricians, and others often provide primary care while treating patients under their care). How much primary care should specialists provide? Little is known about the most desirable or most appropriate mix between specialty and primary care that should be delivered by either specialty or generalist physicians. Is the provision of primary care by specialists an efficient use of the specialist’s time and skills? Should primary care provided by family practitioners be considered equivalent to that provided by general internists? Is a 50/50 distribution of generalists and specialists as desirable in the United States as it is in other developed countries where specialists are hospital-based and most community-based practitioners are family physicians? Do non–primary care specialists provide the same primary care and preventive services as generalists? How adequately do specialists and subspecialists keep abreast of developments in general internal medicine? These are but a few of the questions that must be addressed in determining how the nation’s needs for primary care services will be best served.

In the meantime, the country must better use the existing physician workforce. Continuing medical education and recertification must be available to specialists who seek to update their primary care skills.

The Need for a National Work Force Commission

Many recommendations have been made for a national policy to better coordinate the supply and distribution of the health care work force to meet the nation’s health care needs (1, 4, 5, 7, 8, 13, 19). To perform this function effectively, a national commission is required with regulatory authority to set targets for the total number and types of physicians. A commission is needed that can coordinate federal policy regarding payments for physician services to encourage more physicians to become generalists. Regulatory authority to allocate medical resi-
dency and fellowship training positions will be necessary, along with a concerted policy regarding the funding of graduate medical education to assure that the training of physicians matches national needs.

A national commission, properly empowered to develop and implement national health manpower planning goals, would help achieve a better balance in the nation’s health professions work force. To have a meaningful effect on the specialty distribution of future physicians-in-training, the commission should be empowered to determine the aggregate numbers of residency and fellowship training slots by specialty. Within the context of a national health professions work force plan, medical school graduates would compete for a limited number of residency and fellowship training positions, and the availability of training positions would depend more on regional and national training needs than on the service needs of institutions.

No definitive data currently exist on the optimal mix of physicians, and more research is needed regarding predicting physician requirements by specialty. Ideally, the physician work force should respond to patient population needs, as well as to institutional and organizational needs for health care professionals. It should accommodate differences in requirements among geographic areas and should reflect personnel needs for medical educators and clinical researchers in addition to requirements for physicians in various practice settings and organizational delivery systems. Physician work force policies must also consider the availability and roles of other nonphysician health care providers. However, until a more refined model is developed, the initial goal should be to seek to achieve a balance of 50% specialists and 50% generalists.

There will always be limitations in the methods used to estimate physician work force needs. Policies based on estimates will probably result in distortions. But given the current radical imbalances, the College sees no alternative to a regulatory solution over the short term. Over the long term, we should seek the proper mix of economic and educational incentives that make the regulation of the number of slots unnecessary. In the long run, the work force needs of health plans will increasingly influence graduate medical education to produce physicians with the kinds of skills needed by the plans. As these forces take hold, the need to regulate the total system will diminish and may ultimately disappear. However, because experience indicates that regulatory agencies tend to be self-perpetuating, explicit criteria for external review and “sunset provisions” for discontinuing the commission when it is no longer needed should be established.

Structure and Function of the National Work Force Commission

A National Health Professions Work Force Commission should be established by Congress to help develop and implement a national work force policy for health professions. It should be relatively independent and broadly representative. Membership should include physicians and physicians-in-training who are knowledgeable about graduate medical education, but members should not be seen as representatives of particular interest groups. The commission could be insulated from daily political pressures (similar to the Securities and Exchange Commission), with appointments transcending presidential administrations and decision-making authority that is not subject to political interference. The commission should be established as a long-standing body with a stable and adequate budget over a period of years, but the entire work force planning process, including the national commission, should be subject to periodic renewal by Congress after external review by an independent authority such as the General Accounting Office or a special task force that would provide recommendations either directly to Congress or to the Secretary of the Department of Health and Human Services.

One of the principal tasks of the commission would be to advise the federal government regarding a national health professions work force policy that would meet the nation’s health care needs. The commission would develop plans to implement the goals of the national work force policy, set targets concerning the aggregate numbers of physicians to be trained, and coordinate with state and regional agencies to achieve physician work force goals. The national commission would also allocate postgraduate medical training positions to specific program locations within the overall targets by specialty. In making allocation decisions, the commission would rely on private sector accreditation bodies (for example, the Accreditation Council for Graduate Medical Education) for evaluations of the quality of residency training programs.

Physicians frequently enter practice in the geographic area where they receive their residency training. This observation argues in favor of including, to some extent, information on community needs in residency program allocation decisions. State and regional work force groups could provide advice and recommendations concerning community needs, giving particular attention to the needs of inner-city and rural areas. On the other hand, the ability of residents to meet service needs during their training is not an appropriate principle on which to base allocation decisions; over the long run, such service needs must be met by more rational and acceptable mechanisms. Special consideration should be given to improving the representation within the profession of minority and underserved groups, although it is the decisions made at the point of entry into the profession (that is, medical school admission) that most affect this representation.

The commission should also be charged with developing projections of aggregate supply and requirements for physicians by specialty and for nonphysician providers. The commission should determine health care needs under alternative delivery systems and should recognize differences in requirements for health professional personnel among various population groups and geographic areas. Research should identify and clarify national supply needs by specialty, the particular manpower needs of inner-city and rural areas, and other issues of geographic and specialty distribution.

Principles for Allocating Residency Training Slots within National Limits

1. Quality of the educational program should be the strongest determinant in making allocation decisions among programs.
2. Service needs should not dictate the number of training positions. However, special arrangements during an extended transitional period may be required for many hospitals that currently depend heavily on residents to meet their patient service needs. Funding will be required to replace housestaff to meet service needs, especially for public hospitals in some of the nation's largest urban centers. Even with additional funding, the ability of institutions to meet their patient care needs could be compromised unless enough properly trained replacements, including nonphysician personnel, are available.

3. National health care work force policy, including residency and fellowship training allocation decisions, must consider the roles and number of nonphysician workers.

4. Federal Medicare graduate medical education funding and graduate medical education funding under a possible all-payer program should go only to approved training positions.

5. Existing private sector accreditation bodies should continue to evaluate the quality of training programs. These accreditation bodies should expand their functions to provide recommendations to the national work force commission concerning the number of training positions that should be approved for each program.

6. Allocation decisions should be in effect for a sufficiently long, fixed period of time (for example, 5 years) to allow for institutional planning needs and to minimize disruption for residents and faculty. Reallocation decisions should include evaluations of how well each institution or program meets national and local health work force needs.

7. State or regional agencies should provide expertise and advice to the national commission concerning the total number of postgraduate medical training positions, particular local needs, means to improve minority representation, and differences among programs that should be considered.

8. The allocation process and its outcomes should be externally and continually monitored to determine if enough postgraduate residency training positions are available by specialty and to ensure that the process for allocating positions is functioning appropriately. The external review process should periodically reevaluate the process and methods for determining work force supply and requirements.

Other Issues in Allocating Training Positions

The College recommends limiting the number of postgraduate year-1 residency training slots in relation to national needs and the number of students graduating from accredited medical schools. This limitation should not decrease the number of opportunities that would produce more generalists. The annual number of first-year graduate physician training positions should be large enough to allow sufficient opportunities for residency training for all graduates of allopathic and osteopathic medical schools that are accredited either by the Liaison Committee on Medical Education or the American Osteopathic Association. It should also be large enough to allow both sufficient training opportunities for a limited number of international medical graduates and adequate flexibility, recognizing that some training slots may not be filled and that not all medical school graduates will enter residency training. Most importantly, coupled with a national policy to produce more generalists and fewer specialists and subspecialists, it should limit the overall number of residency training opportunities so that more of those seeking careers as physicians would enter training programs leading to careers in primary care.

Competition among students for a limited number of medical school, residency, and fellowship slots is not new. Limiting training opportunities is not inconsistent with other forms of competition that students experience (for example, entry into medical school, choice of specialty and hospital for postgraduate training, and selection of chief resident). Reducing the overall number of training positions and changing the specialty training mix will channel future physicians into the most needed medical specialties.

Medical school enrollments have remained relatively stable during the past decade; however, the number of graduate medical training positions has increased steadily from 73,783 in 1981 to 89,566 in 1991, an increase of 21% (24). The number of residents on duty has increased correspondingly, from 69,738 to 86,217, reflecting a rate of growth of 24%. Because residency positions have grown faster than the numbers of physicians produced by U.S. medical schools and because U.S. graduates have gravitated toward specialty and subspecialty careers, residency programs for primary care specialties have had to rely increasingly on international medical graduates to fill their programs. For internal medicine, the percentage of first-year residency positions filled by U.S. medical school graduates has been decreasing steadily from 86% in 1976–77 to 63% in 1992–93 (25; unpublished data).

The Council on Graduate Medical Education and the Physician Payment Review Commission have recommended linking the number of entry-level graduate medical education positions to 110% of the number of U.S. medical school graduates (1–3). The Pew Commission has recommended setting the limit at 105% (4), and the Josiah Macy Foundation has recommended a cap of 115% (5). If the aggregate target for postgraduate year-1 residencies was set at the number of U.S. graduates (15,466 allopathic and 1,537 osteopathic in 1992) plus 10% (1,700), the target would be approximately 18,700 for 1993. This represents a decrease of 4,263 positions (18.5%) from the number of first-year positions available in 1993 (Grenholm G. Personal communication; unpublished data from the American Medical Association 1992 Annual Survey of Graduate Medical Education Programs). Controlling the number of residency and fellowship training positions among specialties and linking the total number of postgraduate year-1 positions to the output of U.S. medical schools would substantially affect redirecting the future supply of physicians.

Achieving the goal of a 50/50 balance between generalists and specialists and subspecialists, even within a generation, necessitates that the number of residents trained in primary care be greater than 50%. Over the short term, substantial numbers of specialty physicians may need to provide primary care. Subspecialists should be encouraged to increase their role in providing primary care services. Incentives to enter primary care and to seek certification...
or recertification may be necessary. Retraining programs should be available for those who seek to enhance or update their primary care skills.

It must also be recognized that the preliminary goal of achieving a 50/50 ratio is a rough approximation of a more desirable mix of generalists and specialists. Refining this target should be a high priority of the national work force commission. The development of many organized health care delivery systems may necessitate further refinements. The ideal mix may also change because of other factors, such as changes in incidence of disease, population demographics, technologic improvements, and other variations in practice patterns. The national work force commission should promote research to better determine the desired mix of physicians and the numbers and types of postgraduate medical training positions that will be required. Importantly, the target physician work force ratio may need to be modified if major deficits in meeting patient care needs emerge.


References