Influencing Change: Perspectives From a Conference on Graduate Medical Education

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GRADUATE MEDICAL EDUCATION (GME) is the pivotal link in the clinical education of physicians. Although there is a continuum across undergraduate medical training, residency and fellowship training, and continuing medical education, GME provides the concentration of clinical experiences required of physicians in the United States. An important feature of graduate medical education is its dual function: teaching clinical skills to future practitioners is clearly its primary purpose, but the medical services that residents provide to patients also are substantial and, in fact, generate most of the financial support for the system. Over the long term, the education and service functions combine to form an effective conduit for transmitting new health care knowledge and technology into the day-to-day practice of medicine in the United States.

Today, the graduate medical education system has entered a period of rapid change. Yet few of those involved in graduate medical education regard the changes affecting it so profoundly as deliberate, or even directed at the GME system. Rather, these changes seem to be occurring as side effects of (*a*) cost containment, (*b*) increases in the supply of physicians, and (*c*) the development of corporate medicine.

One of the striking characteristics of the nation's graduate medical education system is its mosaic-like governing structure. Numerous public and private organizations are responsible for particular aspects of the system.

- The nation's 127 allopathic and 15 osteopathic medical schools are the major providers of qualified candidates.
- More than 1,300 teaching hospitals determine the size and specialty mix of the residency programs to be offered.
- The Accreditation Council for Graduate Medical Education (sponsored by five national organizations interested in medical education) conducts the nationwide accreditation process, using 24 specialty-specific residency review committees in establishing educational and quality standards for programs.
- The specialty boards certify individual practitioners in specialty, subspecialty, and special competency areas.
- Licensing boards establish minimum training requirements for practice in each State.
- State governments, hospitals, insurers, the Federal Government, and others provide the necessary financing.

In the aggregate, the decisions of these and other organizations, along with those of individual faculty members and residents, determine the characteristics and quality of the graduate medical education system.

Together, these organizations create a pattern of governance, but the policies and decisions of an individual organization only affect, and do not fully determine, the shape of other parts of the system. Given the dispersion of responsibility within the GME environment, the question arises, How can beneficial change be effected?

Purpose and Agenda of Conference

It was in the context of a complex and interdependent system that the Health Resources and Services Administration (HRSA) in May 1983 joined with five national health organizations in sponsoring a conference to consider the emerging problems in graduate medical education. Other sponsors included the Association of American Medical Colleges, the American Board of Medical Specialties, the American Hospital Association, the American Medical Association, and the Council of Medical Specialty Societies. Thomas D. Hatch, Director of HRSA's Bureau of Health Professions, outlined the challenge to participants:

This conference is intended to provide participants with an opportunity to consider the broad currents af-

fecting graduate medical education and to exchange information and ideas with other specialists working in the field. By providing this opportunity, we hope to foster an enhanced understanding of the forces already changing the face of GME and to advance the development of strategies which will ensure that these forces are constructive.

By agreeing to join in this mutual effort, the cosponsoring organizations are indicating their involvement and interest in working cooperatively to sort out priorities and develop responses. A perspective on shaping the future is critical. Once changes occur, it is hard to shift direction. This is an opportunity to advance the collective judgment about what is needed and how to ensure that what is needed is realized.

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The purpose of this paper is to highlight the major issues and concerns that were expressed at the conference and to summarize the themes that emerged. The conference was designed as an iterative process, starting with a preconference distribution of baseline information that focused on six broad topic areas. At the conference, participants were first presented with the perspectives of several of the leaders in GME, whose views provided a basis for discussion and delineation of the issues in subsequent work group sessions. Finally, participants were invited to submit postconference observations emphasizing or expanding upon the exchanges that took place at the meeting.

The topic areas covered by the work groups were (*a*) the impact of increased numbers of medical school graduates on the GME system, (*b*) the responsibilities to provide GME opportunities for domestic and foreign medical school graduates, (*c*) the changes occurring in the financing of teaching programs, (*d*) existing or developing constraints on the teaching environment, (*e*) the relationship between the increasing specialization within graduate medical education and future national needs, and (*f*) difficulties in assuring the quality of the GME provided in the United States. Although the topic areas provided a convenient framework for the work groups, substantial portions of the discussions overlapped, a reflection of the interrelationships between financing, capacity, the quality of programs, and so forth.

Highlights of Selected Papers

The conference opened with a presentation by Dr. Richard J. Reitemeier, chairman of the Accreditation Council for Graduate Medical Education, who discussed the changes that have led to an imbalance between the number of applicants for GME positions in the United States and the number of available entry level positions. Reitemeier described the factors that have contributed to the development of this imbalance and also explored, from the standpoint of both the applicant and the system, the ramifications of the changes that are occurring. His presentation appears on pages 47–52.

Dr. Vivian W. Pinn, chairman of the Department of Pathology, Howard University College of Medicine, shared her concerns about the limited participation of members of minorities in academic medicine and research. Between 1980 and 1982, she noted, less than 5 percent of all medical residents were black, and the black residents were primarily concentrated in the four specialties of internal medicine, pediatrics, general surgery or obstetrics, and gynecology. Few minorities pursue a career in research or academic medicine, Pinn pointed out. For her suggestions on increasing the number of minority candidates in academic medicine, see pages 53–58.

Dr. Duncan B. Neuhauser, Case Western Reserve University School of Medicine, suggested that the approach to residency training and its financing should be subjected to a zero-based approach. He likened efforts to keep the present system unchanged to "trying to keep a dinosaur alive in a new era of mammals." Neuhauser predicted that price competition stemming from an abundance of physicians in the marketplace, coupled with the growing influence of corporations in the health care sector, will require new sources of support and a new rationale for the graduate medical education system. Many universities, he suggested, would be better off if they sold their teaching hospitals to the health conglomerates. He saw little likelihood that teaching hospitals, as presently structured, would be able to continue support for graduate education in a competitive envi-

ronment. However, health care conglomerates might have an incentive to absorb educational costs if the concept of lifelong employment (as exemplified in Japan) and corporate loyalty became widespread in the United States. He observed:

> The way to avoid $50 a month salaries and residents who pay for themselves is simple and at hand. Remember those Japanese companies? If you want expensive clinical training, we can get it if we promote conglomeratization and lifelong physician employment with a single organization.
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> Under these circumstances, these conglomerates will pay for first-rate clinical education for a lifetime because they reap the rewards of this investment. They will not just pay for the first years of education. They will pay for education throughout a career, and pay well. . . .
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> If Toyota knows it has to keep educating its key people, should this not apply to today's and tomorrow's physicians? If you keep advocating our present system of residency education, which was relevant for private practice in 1920, you are advocating the rejection of meaningful, lifelong education in medicine.

Factors that determine the specialty distribution of graduate medical education positions was the focus of a presentation by Dr. Alvin R. Tarlov, professor of medicine at the University of Chicago Pritzker School of Medicine. In the past, he said, the distribution of medical specialties was influenced by the interplay of (*a*) the demand arising from the medical schools for positions, (that is, the number of domestic and foreign graduates seeking entry into GME); (*b*) the availability of positions as determined locally in the teaching hospitals, based on service needs, funding, teaching capacity, and so forth; and (*c*) the demand for medical services in the larger health services domain, as influenced by population, demography, and reimbursement policies. The determinants were multiple and interactive, with no single influence decisive. Tarlov predicted that this situation will change and that the demand for medical services alone will become the predominant determinant of specialty distribution.

Tarlov reviewed the experience common to many European countries, where medical schools under a ministry of education educate large numbers of physicians without reference to the number that the centralized health care services system planned by the ministry of health will require.

> The lesson to be learned is that when education and practice systems are not closely related, and the practice system has a fixed number of practices in each specialty, unemployment or underemployment is likely to result.

Tarlov indicated that he expects the number of practice opportunities in the United States will become essentially fixed because of the radical changes that are occurring in the health care payment system, changes that will constrain both use of services and costs. He summarized the changes he would expect to determine the future specialty distribution of graduate medical education as follows:

- There will be a fixed number of physician practice opportunities within health care corporations. The opportunities for fee-for-service practice will be sharply limited.
- The elasticity in the health care market will be significantly reduced.
- Underemployment of physicians will become a real issue in the 1990s.
- The "market" will exert effective pressure on graduate medical education (also, on the entering class size to the medical schools) to adjust the number of positions according to practice needs.
- In essence, the demand for medical service will become the predominant determinant of the specialty distribution of GME positions.

Views of Work Group Participants

Participants in the conference work groups attempted to define further and crystallize the critical issues relevant to their areas. Although the viewpoints expressed about the appropriate response to these issues were indeed diverse, there was surprising unanimity on the issues of gravest concern. Participants shared a common sense that pressure created by the growing imbalance between the number of medical school graduates seeking residency positions and the number of first-year positions available could undermine the quality of the graduate medical training provided. The capacity of the GME system to further expand and provide new high-quality residency training opportunities is limited, the conferees suggested, by the often precarious financial condition of teaching hospitals and by constraints on the development of appropriate training environments.

There was a strong consensus that the obligation to the American patient to protect the quality of medical care and maintain standards in GME took precedence over any obligation to provide a full spectrum of training opportunities to all graduates seeking entry to the system. If graduate medical education opportunities are constrained, the question becomes, What are the nature and extent of the obligations to applicants seeking access to the

system? Although individual views differed considerably on this point, there was general agreement on the following heirarchy of responsibility:

The American patient. Conferees stressed that the quality of care provided to the American patient takes precedence over all other considerations. Particular concern was expressed that the demand for GME opportunities should not adversely affect the care of the poor and disadvantaged.

U.S. medical school graduates. Conference participants indicated that there was a professional obligation to ensure that all graduates of U.S. medical schools could become fully trained to care for patients. The opinion expressed by a number of conferees was that medical schools should have a strong professional commitment, as distinct from a financial or legal commitment, to seeing that at least 1 year (some participants said 3 or more years) of residency training was available for graduates of their schools. Similarly, States that have built large medical school systems have an obligation to assure enough GME positions within the State for their graduates.

Views were mixed on whether medical schools had an obligation to assure that a graduate's choice of specialty could be accommodated within the system. However, a graduate's preferences for training opportunities in a particular geographic location and the availability of subsequent job opportunities were considered to be matters of individual concern, rather than a requisite for the educational system. The need to provide opportunities for minorities in research-oriented positions was thought to merit special consideration. Finally, the conferees agreed that national standards for determining overall or specific limits on the number of GME positions were neither feasible nor desirable, and they cautioned against simplistic across-the-board cuts.

U.S. foreign medical graduates. Most of the work group participants indicated that U.S. foreign medical graduates are owed a fair assessment of their ability to enter graduate medical education, but not a guaranteed position.

Refugee alien foreign medical graduates. Humanitarian obligations to provide refugee foreign medical graduates sanctuary within the United States were fully supported, as was an obligation to provide potential candidates for graduate medical education a fair assessment of their ability. Neither guaranteed employment nor graduate medical education opportunities, however, were considered an obligation.

FMGs planning to return to home country. Foreign visitors attending the conference emphasized that their countries are seeking targeted educational opportunities, not employment. The conferees agreed that the United States, as well as foreign countries, can benefit from providing medical training to medical school graduates or practitioners who plan to return to their home country to practice. There are several problems, however, with the current system of evaluating and providing training to foreign visitors. The training obtained in this country is not always appropriate for medical conditions in other countries. Also, the present system of assessment of the clinical skills of foreign applicants does not measure the qualifications of experienced practitioners who desire advanced training. Often, the training is, in effect, subsidized by the American patient rather than by the resident's government, U.S. assistance funds, philanthrophy, or other nonmedical care funds.

Financing of Graduate Medical Education

Concerns about the future financing of graduate medical education continued to be expressed throughout the conference. The financing of graduate medical education through the general revenues of hospitals has been possible in the past because of the willingness of government and third party payors to include the costs of education in their charges. This policy has permitted each teaching hospital to sponsor the mix of graduate programs appropriate for its educational mission, with few concerns about how that educational mission affected the hospital's competitive position in the community. Increasingly, however, the appropriateness of including educational costs in hospitals' charges are being questioned by reimbursers and, in the future, financing problems may significantly modify in what circumstances, or whether, teaching hospitals underwrite educational programs.

State, and more recently Federal, reimbursement policies based on diagnosis-related groups (DRGs) have included adjustments for teaching programs. However, a participant from New Jersey (a State that pioneered in DRG reimbursement) noted that both graduate programs and graduate positions have been eliminated by some hospitals under that system. Even if the adjustment is adequate under a DRG system, concern was expressed that the effect

of this mechanism will be to encourage procedure-oriented and revenue-producing specialties. Primary care specialties were viewed as being at greatest risk, since even under traditional reimbursement policies these programs often require subsidies.

A greater emerging problem is the negative competitive position of teaching hospitals in negotiations with large purchasers of hospital services. An increasingly large share of the hospital services market is controlled by business coalitions, health maintenance organizations, insurers, and other groups that seek to contain their health costs by entering into special or preferred-provider contractual arrangements for hospital services. Teaching hospitals carrying educational costs, and also frequently social obligations to care for the critically ill and financially indigent as well, may be unable to compete effectively for these contracts.

Concern was expressed that reimbursement constraints would adversely affect the quality of teaching programs. Potential problems include the undue burden on medical residents of increased caseloads and changes in the types or range of the patients seen; the pressures exerted to lower utilization of services, discharge patients early, and limit tests or treatment (pressures that may adversely affect a learning situation); the absence of funds for procedures that are essential components of the educational process; and the support afforded technology-based care rather than time- or labor-intensive care.

Conferees also noted that reimbursement changes will affect the specialty mix and the incentives for people to enter certain specialties. One participant, Dr. Stanford A. Roman, Jr., of Dartmouth Medical School, articulated his views on the potential effect as follows.

> If market forces alone are left to prevail in the face of current reimbursement policies, there will be a definite incentive to maximally saturate procedure-oriented specialties. While theoretically gradual adjustment can be expected to occur, a generation of our youth entering medicine will be sacrificed. Their debts have been predicated on incomes in today's market. In the short run, there will remain incentives to increase the numbers entering those specialties least in need in our society. Perhaps there will be a downward adjustment in incomes among these specialties. In these same specialties, however, the margin for downward adjustment relative to average national earnings is also greatest. Those specialties noted to be most needed are associated with the lowest income among medical specialties and are the least desirable for one with considerable indebtedness upon entry.

Need for Cooperative Action

A recurrent theme at the conference was that the multiple groups responsible for the various aspects of the GME process must act in concert to (*a*) determine priorities for access to GME, (*b*) establish a stable financing base, (*c*) protect the interests of candidates from underrepresented groups and ensure that they are not disproportionately affected as changes occur, and—of paramount concern—(*d*) ensure that the quality of GME training is maintained or improved. Although many conferees indicated that adjustments in the nation's capacity for graduate medical education were needed, there was no agreement on who should be responsible for making them. Participants agreed that the medical profession should take the lead in initiating a national dialog, with the participation of the Federal Government, keeping in mind the strengths of our current free enterprise system.

Dr. J. W. Humphreys, Jr., executive director of the American Board of Surgery, stated:

> Medicine, long high among the list of favored professions in the Western World, is today involved in the early stages of a revolution which will, with great probability, bring forth within the next two decades radical and yet unforeseen changes in its structure. The profession is being driven by factors—economic, social, technological and scientific—which it cannot control, but with wisdom, to which it can accommodate without loss of quality. . . .
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> Whatever the conference accomplished, it is certain that medicine and its various components are in a state of violent motion and revision. The signs are evident, the symptoms are uncomfortable, but dialog between persons of all persuasions, such as the one provided by this conference, is the only hope of relief. . . .

Government, the private sector, and the profession must continue to work together to devise effective strategies to meet the formidable challenges in the rapidly changing environment of graduate medical education.