

3. Problems and Promises: The Potential Impact of Graduate Medical Education Reform

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WHILE DISCUSSION OF HEALTH CARE REFORM HAS centered on the critical issues of how to achieve universal coverage and how to pay for health care in the future, policy analysts and lawmakers have appropriately turned their attention to the structures underlying the health care system, one of which is the physician workforce. There is now virtually unanimous agreement that our medical education system is turning out too few generalist physicians, too many specialists, and too many doctors altogether. A number of solutions to this problem have been proposed, ranging from what may be characterized as a *laissez-faire* reliance on so-called market forces (Cooper 1994; Dranove and White 1994) to the imposition of a new federal regulatory apparatus that would determine the number and distribution of positions in graduate medical education (Council on Graduate Medical Education 1994; Josiah Macy Jr. Foundation 1993; Physician Payment Review Commission 1993, 1994; Rivo and Satcher 1993). The view of the Association of American Medical Colleges is that if market forces fail in the near term to modify substantially the number and mix of physicians in training, a politically independent national commission should then be responsible for limiting residency positions in accordance with an informed assessment of future needs (Association of American Medi-

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cal Colleges 1993; Cohen 1993). This must be accompanied by a program that broadens the financial support for medical education beyond the Medicare program to include all payers for health care.

Fitzhugh Mullan and his colleagues (1994) have analyzed the likely consequences of the most common recommendation by proponents of regulation: limiting the number of training positions nationally to 110 percent of the number of graduates of U.S. allopathic and osteopathic medical schools and allocating half of those positions to individuals who will graduate into practice in one of the generalist specialties. Mullan et al. applied these numbers to a recent cohort of medical school graduates and, with a series of appropriate assumptions, mapped the result onto our system of graduate medical education (GME). Their analysis showed that the impact would indeed be dramatic, as full implementation of the plan would lead to a nearly 50 percent increase in the number of graduates of family medicine programs and a greater than 50 percent decrease in the number of trainees in the internal medicine subspecialties, surgical specialties, and the hospital-based and other specialties. These results are not far from rough estimates generated by one of us, using less sophisticated analytic tools (Cohen 1993).

The data corroborate the judgment that our medical education system has become too large and too expensive for its own good, a judgment that applies as well to the entire health care system. However, any undertaking toward "right sizing" this system will inevitably cause pain. Such an effort risks the creation of new distortions and the damage or loss of components of the system that most observers would consider to be of unassailable quality. Hence the most important admonition: "Be careful!"

In addition, Mullan's data highlight critical issues that medical education will be forced to address as we move into a new era of constraints. The first is the need for the informed assessment of workforce needs recommended by the AAMC. The concept that half the GME positions nationally should be in one of the generalist disciplines was extrapolated from the idea that half of all physicians involved in patient care should be generalists, a goal that is now known to be attainable only by the year 2040 even if the residency cohort changed today to 50 percent generalists (Kindig, Cultice, and Mullan 1993). The idea that physicians in practice ought to be evenly distributed between specialists and generalists is itself an extrapolation from comparisons with other nations (Schroeder 1984; Whitcomb 1992) and between our current system and that of health maintenance organizations (Tarlov 1986; Weiner 1994). However, these

must be recognized as broad concepts, not precise prescriptions. In the absence of precision, our distance from these goals justifies initiating changes now. To turn an ocean liner a few degrees requires a substantial initial output of energy; once on its new course, fine adjustments can be made to the ship's instrument settings. Similarly, the more subtle tuning of our medical education system must be done carefully, based on the best available analysis.

One essential component of this analysis will be data of the highest quality. We have only recently learned how to measure accurately the size and distribution of the resident physician workforce. The current yearly changes are substantial. Mullan and his colleagues base their predictions in part on assumptions regarding the "branching and switching" of residents from generalist disciplines, particularly internal medicine and pediatrics, to subspecialty training. Yet the previously observed annual increases in the number of subspecialty training positions are no longer occurring. We caution against overestimating the net impact of this early "market effect." However, we must also be aware that even as we are trying to determine how best to regulate this system, the system itself is substantially changing.

A matter of particular concern is the potential impact of changes in residency training on the provision of patient care. One reason the system of GME has grown so large is that residents provide high-quality services at relatively low cost, which has especially benefited municipal hospitals serving a large population of patients without medical insurance. The costs to these institutions of hiring replacement workers, be they physicians, nurses, or physician assistants, will be substantial. Although the proposed health care reform legislation provides for "transition" support for hospitals that lose residents in a newly regulated system, the evidence suggests that this support will be permanently required.

A related matter is the mechanism by which the changes will be carried out. How would a commission empowered to change the mix and number of residency positions determine which should be kept and which should go? How will the highest-quality programs be preserved while also safeguarding concerns like provision of medical care to disadvantaged populations or protection of opportunities for minority physicians? The idea of the formation of medical education consortia to manage these problems locally and regionally (Council on Graduate Medical Education 1994) has great appeal. Yet few such consortia currently exist, and the geographic distribution of medical schools and teaching programs suggests that there would be large holes in some regions and saturation in

others, a situation that might impede the orderly development of any regulatory apparatus.

Another concern relates to the capacity of the GME system to expand in the areas of the generalist specialties. Mullan et al. projected a substantial increase in the number of training positions in family medicine. This will require the creation of new programs and the expansion of existing ones, accompanied by the attendant appropriate faculty and facilities. However, the academic faculty in family medicine is currently relatively small and already under strain. Undergraduate teaching in this discipline is expanding, and the faculty is assuming new roles as mentors for students and residents and as important members of academic committees. It is unclear what new facilities can and will be developed to meet the training requirements. All this is occurring at a time of considerable pressure on the funds traditionally used to initiate new programs, particularly funds appropriated by the Congress under Title VII of the Public Health Service Act.

Like the health care system in general, the medical education system is already under tremendous pressure to change, to remain "relevant" to today's health care needs. Legislative efforts do not signal a major new direction, but, rather, they will serve to accelerate and possibly regulate some of the changes that we already see taking place. Our concern is that while we accept the need for immediate change, we must also anticipate its unintended consequences, given the long lag time we know is inherent in this system. Mullan and his coauthors point out some of these potential consequences: the loss of quality training opportunities; the inability to provide adequate health care to needy populations; a greater sense of disorder and disruption in a highly competitive education system. Our colleagues have often inquired how the government, or anyone else, can claim the ability to plan accurately for physician workforce needs, given the track record of predicted shortages and surpluses over the last 30 years. We believe, however, that the tools are at our disposal to take on this task with greater intelligence and flexibility than has been heretofore shown. In all of our considerations we must remember the precept that guides the practice of medicine: "First, do no harm."

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