For the Health-Care Work Force, a Critical Prognosis

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The United States faces a looming shortage of many types of health-care professionals, including nurses, physicians, dentists, pharmacists, and allied-health and public-health workers. The results will be felt acutely within the next 10 years. Colleges and health-science programs will all be affected by the demographic, technological, and bureaucratic trends driving the pending crisis. But they can also be part of the solution.

The growth of the American population and the aging of the baby-boomer generation will continue to increase the demand for health-care services and providers. More than 100 million people in America already have chronic illnesses or suffer from degenerative conditions such as cancer, cardiovascular disease, and arthritis, which require long-term management by different kinds of health-care providers — and that number will only get larger with time. It is estimated that over the next decade we will need at least 20,000 more physicians specifically trained to care for elderly patients. Fewer than 8,000 geriatricians are in practice today. The federal Bureau of Labor Statistics also projects that, during that same time period, we will need 3.5 million more workers to meet the increasing demand, in addition to replacements for the two million health-care workers who will leave their positions.

On top of that, advances in fields like genetics and information technology will create additional work-force requirements that we can't even begin to estimate. We will need more and different kinds of practitioners and technicians, be they robotic-surgery operators or new types of radiology technologists. But given the current number of people entering the health-care work force, it will be virtually impossible to meet those projections.

After September 11, 2001, there was a slight uptick in applications and enrollments at many health-professions schools, following a period of decline during the 1990s. This fall the nation's medical schools experienced a 2.3-percent increase in enrollment and an 8.2-percent increase in applications, the Association of American Medical Colleges reports. That is heartening news, but there have not been changes of the magnitude needed to make a difference in our health work force.

Different expectations and lifestyle preferences on the part of today's health-care workers are partly to blame. Thirty years ago, in what was more of a manufacturing economy, young people saw health care as high tech. In today's information age, it is now viewed as more low tech. The messiness and stress of caring for people with complex illnesses may not be attractive to young people who have many career options. The hurdles to degrees in the health professions — including extensive math and science course work, expensive education, daunting debts, and lengthy training — are also likely deterrents.

Other potential problems are related to generational change. The future health-care work force will come largely from Generations X and Y, both smaller demographic groups than the baby boomers. Compared with the boomers, who placed a high priority on careers and had a greater tendency to stay with one career for a lifetime, Xers and Yers appear more interested in work that can accommodate their families and personal lives. They often seek flexibility, telecommuting, family leave, and part-time options — almost none of which can be met by the demands of a career in the health-care professions. Even if the same proportion of individuals was recruited into health-care careers from the two younger generations as from the boomers, however, we would still not have enough people to replace those who will soon retire, let alone expand our capacity.

More bad news: Our country faces worsening shortages of faculty members in the health sciences. In July the Association of Academic Health Centers released a report that said 94 percent of CEOs at academic-health centers deemed faculty shortages a problem in at least one health-professions school; 69 percent thought those shortages were a problem for their entire institutions.

Several factors account for the widespread faculty shortages, including a low level of interest in academic careers among those entering the health-care professions, heavy faculty workloads, disparities in salaries between academe and private practice or industry, and retirements among baby boomers.

In colleges of nursing, for example, where master's or doctoral degrees are required, the mean age of faculty members with master's degrees in nursing is 48.5. Retirement projections for nursing-faculty members show that from 2004 to 2012, 200 to 300 Ph.D.'s will be eligible for retirement each year. We do not have enough nursing educators in the pipeline to stem such losses.

The situation is similar in pharmacy programs. Of the nation's 82 schools of pharmacy, 67 reported in a survey that they had an average of 6.2 vacant faculty positions last year. Thirty percent of the open academic positions had been vacant for at least a year. Most important, 92 percent of those vacancies represented teaching positions that directly affect the number of pharmacy students a school can enroll.

In radiology, a specialty that suffers one of the worst shortages in the health field, the average age of full-time professors is 54. It is anticipated that within the next couple of years, 27 percent of full-time and 80 percent of part-time positions will be vacant, in large part because of retirements — a trend not dissimilar to those in other health-care professions. The shortages in radiology are compounded, however, by an escalating reliance on (and consumer demand for) medical-imaging procedures and a decreasing number of programs for training those health professionals.

The final crucial factor precipitating the health-care-work-force crisis is a lack of comprehensive work-force planning on the parts of academe, government, and the health-care professions. We need strategic direction instead of the current piecemeal approach at the national and state levels; both federal and state policy making has tended to respond

to immediate crises or issues related to one particular profession or constituency. Commissions and task forces abound, yet many reports gather dust on shelves; the infrastructure for putting good ideas or new policies into effect is at best uneven.

Shortages in the health-care work force are not local or isolated issues. They require attention at the highest levels of the federal and state governments. College leaders should work together with government officials to make that a top priority on the domestic-policy agenda.

Some states — with the help of their university systems — have looked across the professions to confront health-care-worker shortages. In 2005 the University System of Georgia appointed a task force on health-professions education to analyze future needs and inform decision making in response to the needs of the state. In its final report, the Task Force on Health Professions Education cited projected faculty retirements, smaller pools of potential faculty members, inadequate facilities to support expanded enrollments, and a limited number of clinical sites to support the clinical-education needs of students enrolled in the state's health-professions programs as barriers to an effective and coordinated response to market demand. Programmatic integration also was identified as a confounding issue: The report identified a crucial need for the university system to work closely with the state's technical-college system, the primary educator of health-care technicians and paraprofessionals, to ensure transparency and clarity in educational requirements so that students are able to move successfully between the educational systems.

Such collaborations between colleges and states are a good beginning. But higher education and the government must become partners on the federal level as well. The institutions that educate the nation's future health-care professionals must work together to devise innovative solutions to the myriad challenges we face — and must finance them, too.

The federal government should enlist the leaders of academic health centers nationwide as key advisers to tackle the challenges confronting the health-care work force, thus reinvigorating a longstand-ing partnership to support education in the health professions and ensure quality care to the public for the future.

The creation of a national commission on the health-care work force would also be a boon. Such a commission, renewable every 10 years, would serve as the chief advising body to Congress and the president on the subject. While it would have no regulatory power, it would be the independent expert panel to identify issues, analyze policy affecting the health-care work force, examine the benefits and risks of health-care legislation, evaluate the education and research functions of academic health centers and other educational institutions, and recommend ways to resolve problems as well as to plan proactively. The commission would provide a forum for interaction at the national level for groups representing health educators, biomedical scientists, and health-care providers.

Colleges and health-sciences centers must also deal with the work-force shortage issue at their own institutions. They should address the growing shortages of health-professions faculty members by supporting faculty-development programs and expanding accelerated training programs. Continuing education is a key strategy in retaining health-professions faculty members, as are mentorship programs — particularly for retaining junior members of the professoriate and those groups that have been historically underrepresented in the health-care professions.

Offering loan-repayment and loan-forgiveness programs would also be a draw. The high incidence of debt among graduates often drives health-care professionals to the most lucrative employment settings. Forgiving debt or offering generous loan-repayment plans creates more flexibility for colleges and universities in efforts to attract professionals to academic careers. And to augment their core faculty members with nonsalaried, community-based clinicians who can provide valuable field-based clinical experiences, as health-professions programs must do, institutions can offer enticements like discounted or free registration in the continuing-education programs, tuition discounts or waivers, and access to other institutional resources (recreational facilities, for instance).

Colleges and health-science centers must also focus on increasing and improving the applicant pool, not simply in terms of sheer numbers and mix of health professions, but also with regard to diversity.

Alarming disparities in health status continue to plague our nation. A health-care work force that mirrors the population it serves is widely believed to increase access to care and improve quality of care; therefore, increasing the recruitment of individuals from diverse backgrounds to the health professions is crucial in light of the increasing diversity of the American population. Colleges and health-science centers must focus on untapped populations, such as underrepresented minorities and health professionals trained abroad. Accelerated training programs could be offered to ensure that the clinical and language skills of such health-care providers are at acceptable levels. In areas with rapidly growing Hispanic populations, bilingual students could be targeted as medical interpreters, providing invaluable exposure to the health-care system — and increasing the likelihood that they will pursue careers in the health professions.

The health-care shortage we face in the United States is serious. Some experts may argue that there is no cause for alarm, because work-force shortages are cyclical, market-driven, and easily ameliorated. But that perspective is not valid today. The work-force shortfall in health care cannot be resolved in the marketplace alone. It is time for organized action, not only within colleges, but also at our nation's highest levels.

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