A Recipe for Medical Schools to Produce Primary Care Physicians

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The implementation of health care reform in the United States will add to the growing demand for primary care physicians. Only about a third of active physicians in this country currently practice primary care medicine, and the proportion would probably shrink if the only source of new primary care physicians were graduates of U.S. allopathic medical schools, since only 16 to 18% of those graduates are likely to go into primary care.[1]

Our country would be better served if an adequate supply of primary care services were available. Health care systems that rely too much on specialty care services are less efficient and more expensive than their counterparts that are focused on primary care.[2] Preventive care, care coordination for the chronically ill, and continuity of care, which are the hallmarks of primary care, can all improve the overall quality of services that patients receive.

It seems clear to me that we need to find a way to increase the number of graduates of U.S. allopathic medical schools who go into primary care. The alternatives are to allow the status quo to continue (with larger proportions of primary care physicians being international medical graduates and graduates of osteopathic medical schools), to allow advanced practice nurses and physician assistants to assume a greater role in providing primary care, or to allow primary care to dwindle and move toward a system in which patients are cared for by multiple specialists. As someone who spent nearly a quarter of a century as an associate dean for medical education, I am loath to give up on the possibility that allopathic medical schools can do a better job of getting their graduates to go into primary care.

The recent launching of new allopathic medical schools provides an especially good opportunity to design the medical education experience in a way that fosters student selection of primary care careers. A majority of the new schools state that their mission is to produce primary care physicians or, more broadly, to meet the workforce needs of their region. Although the steps I outline below are intended as a recipe for new medical schools with just such a mission to follow, existing medical schools could also reengineer themselves to achieve the same goal.

New medical schools must recognize the current factors that discourage medical students from pursuing primary care careers and then devise ways to overcome these barriers. Most U.S. medical students gain a discouraging view of practice in primary care as they observe harried primary care physicians who have too much to do and too little time in which to do it. They hear disparaging remarks about primary care from residents and faculty members, who extol narrowly focused expertise. Students see the same values expressed in the wider society, which compensates subspecialists at far higher levels than primary care physicians. Students are intimidated by the breadth of knowledge required for primary care — but simultaneously concerned that primary care might be boring. And schools have difficulty finding high-quality ambulatory care teaching sites where students can learn the art and science of primary care.

Medical schools that are truly committed to training graduates for primary care must recognize that every decision they make should advance the mission of the school. Institutional decisions create a meta-curriculum that frames the other components of a medical school. Certainly, articulating a mission is important, but unless other institutional decisions clearly bolster that mission, the rhetoric will appear empty, if not disingenuous. The paramount decision, in my view, will be naming the leadership of the new medical school: the founding dean must be a primary care physician. Next, the dean must make it clear that the school's mission will not be held hostage to rankings in *U.S. News & World Report*. Taking such a stance will require courage and commitment and must be explicitly supported by the university president and the governing board of the medical school and its parent university.

The first test of this commitment will come in the way in which admissions are handled. The little evidence that is available on factors predicting career choice indicates that students who express a desire to serve underserved populations, who demonstrate altruism, and who are committed to social respon-

sibility are more likely to go into primary care.[3] I believe that admissions criteria need to be broadened beyond scores on the Medical College Admission Test (MCAT) to include these personal attributes. The school should adopt an "MCAT-blind" admissions policy, dictating that students whose MCAT scores are at or above a predefined minimum that predicts a likelihood of success in medical school should then be considered further for admission without the reporting of their MCAT scores to the admissions committee.

I would further advise that the curriculum be based on a patient-centered learning approach, in which the basic sciences are studied through case presentations of richly described virtual patients who are "seen" repeatedly by students over the course of the curriculum, just as a real panel of patients would be. The traditional head-to-toe cadaver dissection should be abandoned in favor of the examination of prosections that illustrate the specific anatomical problems of the virtual patients. Learning should be integrated into focused explorations of each patient's problems.

More generally, the curriculum should be built around the competencies expected of a primary care physician. Achievement of those competencies should be measured with performance-based methods of assessment that authentically reflect the tasks expected of primary care physicians. And the assessment tools used should place value on the ability of students to be comfortable with uncertainty and to use clinical resources wisely and prudently.

Teaching medical students to function effectively as part of an interprofessional team must be deliberately planned as part of the curriculum. Medical students must acquire knowledge about the healing traditions of other disciplines, show respect for other health care professionals, and appreciate the valuable services those disciplines provide to patient care. Medical students must acquire skills related to leading, following, decision making, communicating, and allocating tasks as members of a team.

Students should be offered the opportunity to do their clinical training in community-based settings, perhaps even in their hometowns if possible, where they should be assigned to a primary care practice. After an initial block of time spent exclusively in that practice, students should use the health care resources in their assigned community to acquire a broader set of clinical experiences in other medical specialties.

In addition to exploring methods of traditional biomedical research, new medical schools should emphasize sociomedical research, which examines the translation of scientific knowledge into clinical practice. In primary care, such research can address issues of patients' adherence to medications, smoking cessation, and other preventive practices. Research opportunities in these areas would be ideal for medical students who aspire to careers in primary care.

In a sense, the relationship between a faculty member and a medical student should mirror the doctor–patient relationship: it should be one of mutual respect and collaborative decision making. In addition, medical schools should embrace rituals and traditions that support primary care, such as National Primary Care Week. School policies should encourage cocurricular activities, such as a student-run free clinic, and grading polices should promote collaboration rather than competition.

Health care reform promises changes in the system of care that will promote some form of capitated payment and narrow the income disparity between primary care physicians and specialists. The anticipated result is primary care practice that will appeal to students as being both professionally and personally rewarding.

Even if a new medical school follows the recipe closely, many students will still choose to enter other specialties, but I believe that exposure to this curriculum will make them more "primary care responsive" clinicians. Students should be guided and supported in making career decisions that are well suited to their temperaments and talents. Even so, I believe that schools that follow these principles should expect to see a majority of their graduates entering primary care practice. And whether we succeed or not, we must try — the quality of U.S. health care hangs in the balance.

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