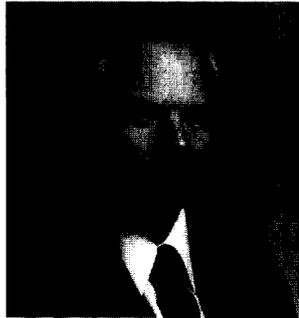

EDITOR'S PAGE



Academic Subspecialties at the Crossroad

WILLIAM W. PARMLEY, MD, FACC

Editor-in-Chief

Journal of the American College of Cardiology

As one examines a traditional academic department of medicine, it consists of strong subspecialty divisions comprising highly trained professionals doing research and providing tertiary care to subjects with complex but focused problems. General internal medicine is frequently a division of the department of medicine. Its members have major outpatient clinical responsibilities but rarely perform laboratory research. Because they are rapidly becoming the financial gatekeepers in capitated systems, as their influence increases, the role of traditional subspecialty divisions may be reduced. What, then, is the future of academic subspecialty divisions such as cardiology?

Several scenarios have been discussed in the literature. The first is the alteration in numbers of subspecialists. The Council on Graduate Medical Education (COGME) has recommended a reduction in first-year residency positions to 110% of U.S. medical graduates, with the additional recommendation that 50% enter primary (generalist) care at the end of their training (1). These general concepts have been endorsed by a number of influential medical organizations (2,3). Generalist care is considered to be family medicine, general internal medicine, general pediatrics and obstetrics/gynecology. These directions will inevitably reduce the number of subspecialty trainees in academic programs. In the University of California system, we are being asked to reduce the number of subspecialty trainees by 30%, a process we began July 1, 1994.

A recent projection of how the overall goals listed above can be achieved yielded some interesting results (4). To meet the goal of 110% of U.S. medical graduates, the total number of first-year residency positions would decrease from 24,433 to 18,783. At subsequent equilibrium, the total number of residents would decline from 103,858 to 80,699. To achieve a goal of 55% becoming generalists, there need only be a 9% increase in the current number becoming generalists. However, the number of specialists would have to decrease by 44%. Thus,

the net effect of these recommendations is a *dramatic* reduction in subspecialty training, with only a slight increase in generalist trainees. The geographic application of these changes and the elimination of many subspecialty training programs would be a formidable task.

Another scenario frequently discussed is the retraining of subspecialists to become generalists. At a retreat held by our department of medicine last year, a committee report from General Internal Medicine suggested that it might be "difficult, if not impossible" to retrain medical subspecialists to become generalists! I personally don't believe that this dire prediction applies to most cardiologists. Nevertheless, a recent article suggested four possible pathways whereby this retraining could be accomplished (5):

1. Institute a residency training program of up to 2 years with Board certification. This is a tried and true method but impractical for most subspecialists in terms of both time and income.
2. Develop an organizational certificate of qualification after 12 months. This is almost as problematic as option 1.
3. Specific institutions could develop shorter programs and offer certificates of completion. These could be very effective and user friendly but might vary widely in quality.
4. Retrain in a primary care apprenticeship. Although this could be widely utilized, it would suffer greatly from standardization, quality and effectiveness. If considerable retraining is required in the future, it would seem that short, effective institutional programs might provide the best mix of these four options.

Others have discussed the vulnerability of the academic medical center in a managed care environment (6). On the plus side, they generally have excellent faculty and are used to providing care for complex problems. Frequently, they have newer technology and pharmaceutical agents that can benefit selected patients. On the negative side, they may be complex, unwieldy and inefficient in delivering managed care. Unless there is governmental recognition and support for the addi-

Address for correspondence: William W. Parmley, MD, Editor-in-Chief, *Journal of the American College of Cardiology*, 415 Judah Street, San Francisco, California 94122.

tional goals of education and research, academic centers will have difficulty competing for managed care patients in an open market place.

What, then, will the medical subspecialty division of the future look like? Most projections suggest that it will have fewer faculty members and fewer or no trainees. Medical residents may perform more of the duties of absent fellows. Cardiology divisions might even have less responsibility for some of the noninvasive tests that we currently perform. Clearly, however, we will still run the catheterization laboratories, including electrophysiology, although it is possible that there may be much more regionalization of services than currently exists. Hopefully, we will be able to maintain vigorous research programs, despite substantial cutbacks in funding.

As we undergo these changes, however, certain principles seem apparent:

1. We must *go slowly* so as not to destroy a system that is responsible for the premier place of subspecialties in our medical system.
2. We must maintain the close relationship of research and clinical applications that has been so productive in cardiology.
3. We must maintain the excellence of academic subspecialty training programs, even though the numbers of trainees will decrease.
4. In cardiology, we still deal with the number one killer (heart disease) in the United States. Therefore, there must be a relative bias toward protecting cardiology programs as overall changes occur in all subspecialty training programs.

Above all, I hope that we can protect the vitality and excitement that has permeated the growth and development of the discipline of cardiology.

References

1. Council on Graduate Medical Education. Improving Access to Health Care Through Physician Work-force Reform: Directions for the 21st Century. Washington (D.C.): Public Health Service, Health Resources and Services Administration, U.S. Department of Health and Human Services, 1992.
2. Association of American Medical Colleges. AAMC policy on the generalist physician. *Acad Med* 1993;68:1-6.
3. Todd JS. Health care reform and the medical education imperative. *JAMA* 1992;268:1133-4.
4. Kindig DA, Libby D. How will graduate medical education reform affect specialties and geographic areas? *JAMA* 1994;272:37-42.
5. Wall EM, Saoltz JW. Retraining the subspecialist for a primary care career: four possible pathways. *Academic Physician and Scientist* 1994;June/July:6-11.
6. Blumenthal D, Meyer GS. The future of the academic medical center under health care reform. *N Engl J Med* 1993;329:1812-4.