Whither Primary Care in the Academic Health Science Center?

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Five forces that shape the form and function of the future academic health center are a mandate to decrease health care costs, a surplus of physicians, intense competition for the provision of tertiary medical care, a suboptimal diagnosis-related group (DRG) case mix, and decreasing funding for manpower training and research. All five forces cause the academic health center to be much more in need of strong primary medical care services. This article describes the current relationship between primary care and the academic medical center, new contributions that primary care can make to the academic medical center, and the benefits that would accrue to both the academic medical center and primary care should a closer working relationship develop. These benefits include increased outpatient volume and revenue, a more balanced inpatient case mix, better primary medical care education, an enhanced community reputation, and greater influence by primary care on academic medical center policies. Published and personal case study experiences that show some of the potential problems with a closer working relationship between primary care and the academic medical center are described.

The academic medical center is the product of social, economic, and political forces. Five forces have shaped the form of the academic medical center to this time[1,2]: (1) a demand by the public for the best high-technology medical care possible regardless of cost; (2) an inadequate supply of physicians; (3) the massive federal funding of research and teaching programs through the National Institutes of Health, health manpower initiatives, and the Veterans Administration; (4) the financing of mainstream health care for the poor and elderly through Medicaid and Medicare legislation; and (5) a willingness by employers and insurance intermediaries to pay for health care on a cost-plus, tax-deductible basis.

As forces change, so will the structure and function of the academic medical center. Five new forces are causing it to change at this very moment[1-3]: (1) a demand by patients, employers, and government to limit health care costs, presumably without decreasing quality or limiting access; (2) a surplus of physicians, particularly of subspecialists; (3) intense competition from private tertiary care hospitals, multihospital corporations, and subspecialists in private practice; (4) a suboptimal diagnosis-related group (DRG) case mix skewed to more complicated, poorly reimbursed diagnoses, combined with more costly patient care operations resulting from teaching burdens; and (5) decreasing funding for manpower training and research.

The academic health center will adapt as necessary, perhaps dramatically, to these new pressures and will look quite different in the future. In fact, many academic health centers are already experiencing change; one medical center's experience has been described in detail.[3] As the academic health center changes, new groups of professionals or types of services, not now important, may contribute in significant ways to its eventual survival. One such service is primary medical care, especially as provided by primary care physicians.

CURRENT RELATIONSHIP BETWEEN PRIMARY CARE AND THE ACADEMIC MEDICAL CENTER

Primary medical care, though difficult to define, has been characterized by its comprehensiveness, con-

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tinuity, compassion, accountability, and accessibility. There is little about patient care in the academic health center to which these characteristics are universally applicable. The practitioners of primary medical care—general internists, general pediatricians, family physicians, and perhaps general obstetricians—have been limited in their potential and real contributions to the three academic health center missions of teaching, research, and service. In a number of settings, the ambiance of the academic health center appears to deny the value of primary medical care. Although data are limited, anecdotal experience would suggest that there are conflicts over hospital privileges and the organization of inpatient care to a greater extent than in community hospitals. From the academic perspective, there have been controversies about how to measure the quantity and quality of scholarly activity by primary care faculty physicians. Primary care physicians are perhaps more likely to be assigned to some sort of adjunct clinical track, the status of which is viewed as inferior in name, if not in fact.[4] In short, the life of a primary care faculty member in an academic health center operating under these old rules is not to be envied. As the times and the rules change, however, the value and prestige of primary care to the academic health center are certain to be enhanced in institutions sensitive enough to recognize the primary care physician's potential contribution in the new era.

CONTRIBUTIONS OF PRIMARY CARE TO THE ACADEMIC HEALTH CENTER

The contributions that primary care will be making to the academic health center can be divided into three types.[5]

IMPROVED EXISTING MEDICAL SERVICES

Greater participation by primary care physicians in hospital work, under carefully delineated privileges, will allow the coordination of care in an effective and cost-efficient manner as opposed to the often disjointed, if not chaotic, care delivered by a multitude of subspecialists. The functions of general patient advocacy and coordination of services are as valuable to patients in academic health centers as they are to those in community hospitals. Organized primary care could become the focal point of a reorganization of the usual jumble of unpleasant and inefficient outpatient clinics. Those medical centers that have tried increasing participation of primary care physicians have successfully balanced the service needs of patients with the teaching and research needs of students, house staff, and faculty.[6,7]

SERVICES TO NEW PATIENT POPULATIONS

Strong support of primary care physicians is essential if academic health centers wish to provide new comprehensive services, such as home health care, community nursing services, community-based satellite primary care, and nursing home care. Another venture being pursued by many academic health centers that is even more dependent upon primary care physicians for success is health maintenance organization (HMO) development or affiliation. Significant controversy still exists about whether such a venture is advantageous to the academic health center,[8] and each decision must be based on individual circumstances and needs.[9,10] One aspect is clear, however. Should an academic health center wish to enter into the HMO arena, a strong group of academically and clinically successful primary care physicians is essential for success. Relegating these physicians to staff rather than faculty status, or otherwise holding the core primary care case-management role at institutional arm's length, is both unacceptable to clinicians and likely to lead to failure of the HMO-academic health center relationship.

FACILITATED ACCESS BY COMMUNITY-BASED PHYSICIANS

A major error by academic medical centers that have established primary care training programs, especially in family practice, has been to place them in community hospitals.[3] The graduates of these off-site programs are now in practice and are referring patients to their community hospital training sites. By supporting strong on-site primary care teaching programs, academic health centers should greatly enhance a continued flow of referrals (assuming a collegial academic environment). Another venture the academic health center might pursue is to make hospital admitting privileges available to volunteer clinical faculty practicing in the community. The delineation of privileges to community physicians may seem a radical move to some academic health centers, but it should be considered by those academic medical centers whose referral patterns are increasingly disrupted by "town and gown" conflicts. Primary care physician faculty can help ensure quality control and maintain faculty standards.

BENEFITS FOR THE ACADEMIC HEALTH CENTER

At least four types of benefits may reasonably accrue to academic health centers that more fully incorporate primary care into their activities and missions.

INCREASED OUTPATIENT VOLUME

Academic health centers in general, and faculty physicians in particular, are increasingly dependent on patient care revenues for growth or even for economic sufficiency. At the very least, increased efficiency and

volume of primary care can protect existing patient population domains, especially Medicare and Medicaid populations, upon which academic health centers are typically more dependent than are community hospitals. For academic health centers to bid effectively for competitive Medicaid contracts without an efficient primary care operation is virtually impossible. Of course, even the most productive and efficient primary care operation fills few hospital beds, perhaps only one bed per 1,000 outpatients in a 400-bed academic health center.[8-11] However, protecting those few beds, or filling 20 to 30 new beds with an HMO of modest size, may represent the difference between profit and loss for the teaching hospital.

BALANCED CASE MIX

Each hospital, including teaching hospitals, must make shifts in case mix to the extent necessary and ethical to allow continued fiscal solvency, and primary care should help such an end. Less complicated cases, with well-defined, more common diagnoses and procedures, are the province of primary care, and their presence in the teaching hospital census will improve the overall reimbursement mix.[12,13]

PRIMARY MEDICAL CARE EDUCATION

Academic health centers provide for excellent teaching in many areas, but not in the office-based practice of general medicine. Yet, primary patient care is what a majority of trainees in any specialty eventually practice. Unfortunately, academic health centers have abrogated the responsibility for teaching primary care, and have instead delegated this responsibility to community-based practices and hospitals. While this community-based training should continue and is valuable, the overall educational process would be improved if academic health centers designed on-site primary care clinical activities that incorporated high-quality primary care teaching. Such a combination of patient care and teaching has been shown to be cost effective.[11] In fact, academic health centers must somehow develop their patient care programs so as to include teaching and research, thus meeting educational needs while simultaneously preserving the public image of state-of-the-art medical practice. As mentioned earlier, on-site primary care training would also create a network of primary care graduates whose most natural referral institution would be the academic health center.[3]

ENHANCED COMMUNITY REPUTATION

Development of new primary care activities is likely to antagonize a number of community-based primary care physicians. In the case of public institutions, however, these protests can be managed if public money is not used. The coming era will be highly competitive, and academic health centers have as much right as others to compete effectively. Business, insurance companies, and government will applaud these competitive efforts, particularly if academic health centers can be as innovative in new health care delivery systems as they have been in the biomedical sciences. Particular goodwill will flow to those academic health centers that can efficiently care for Medicaid patients, and the academic health center will benefit from enhanced relationships with industry, state Medicaid offices, and state legislatures.[14]

BENEFITS FOR PRIMARY CARE

The effects of incorporating high-volume, high-quality primary care into the academic health center must be mutually beneficial to both the subspecialty and the primary care disciplines. At least three benefits will accrue to primary care in this new relationship.

INCREASED OUTPATIENT VOLUME

Successful teaching and research in primary care requires a much larger volume of patients than in tertiary care. High-volume primary care practices would provide patients for required medical student clerkships, physical diagnosis courses, ambulatory electives, and house staff training as well as for health services and epidemiologically based research. Tangentially, the increased clinical activity provides additional exposure of primary care faculty to students, residents, and faculty on subspecialty services, leading to increased skills in communicating across disciplines.

INCREASED PATIENT CARE REVENUES

Primary care faculty are much less able to generate financial support for teaching and research than are subspecialists, whose procedural work is reimbursed at a higher rate per unit of time. This fact suggests that primary care faculty need the most efficient and productive practices possible in the academic health center. Adequate, although not generous, revenue can be generated to support faculty salaries (and, therefore, teaching and research) and to allow the recruitment of new faculty. It is not clear whether primary care will continue to be a "loss leader," as is now often the case, but any increased revenue is helpful.

ACADEMIC HEALTH CENTER INFLUENCE

Primary care departments will earn the gratitude of the academic health center for their modest, but significant, contributions to academic health center survival. Institutional memory can be short, but at least primary care, especially family practice, will have given more than it got, perhaps for the first time in the minds of some medical school deans. These contributions will allow primary care to have greater influence on academic health center patient care policies and adminis-

trative planning, and primary care faculty physicians may experience increased academic viability secondary to their increased clinical and economic credibility.

CASE STUDY EXPERIENCES AND PROBLEMS

In the interest of stimulating discussion, this article to this point has spoken assertively of a number of positive outcomes that will flow if primary care receives much greater emphasis in the academic medical center. A number of points are assertions at present and deserve confirmation or rebuttal based upon experiences elsewhere.

The authors are not aware of published case studies that describe, in detail, broad experiences with primary care-academic health center ventures, although certain limited aspects of the issue have been described.[11,15,16] The authors have personal experience with major ventures occurring at three academic health centers: the University of Wisconsin–Madison, the University of Utah, and The University of Michigan. None of these three primary care ventures has existed long enough for final conclusions to be drawn, although the Wisconsin experience has been partially described.[3] A number of tentative comments can be made, however, regarding important issues and potential problems to be considered by primary care physicians and academic health center administrators interested in pursuing the collaboration described in this paper.

CONFLICTS AND COMPETING INITIATIVES

As academic centers position themselves to be competitive in a new era of health care delivery, a number of alternative delivery plans and activities must be considered. The development of a university-based HMO or a series of primary care satellite facilities are only two among many possible ways to expend time and resources. Organ transplantation programs, hospice facilities, and free-standing short-stay surgical centers are examples of potentially competing ventures. In an era of finite resources, administrative decisions regarding these ventures must deal with zero-sum finances. Devoting resources to one new venture can automatically exclude the development of others. Local priorities and circumstances will determine which ventures eventually reach fruition. Clearly, major new developments in primary care may not be appropriate at every academic health center. For example, aggressive tertiary care contracting on a price-competitive basis may meet the needs for a few centers.

PREFERENCES OF PRIMARY CARE FACULTY AND RESIDENTS

Primary care physicians often have strong preferences for practicing off campus in community-based facilities. Many physician groups prefer autonomy over affiliation. Billing systems, parking, and appointment and chart systems are just a few of many areas of potential inconvenience and sources of physician and patient dissatisfaction with integrated institutional approaches. Primary care residents often state a preference for training in community-based facilities. The quality and quantity of primary care training available in academic health centers varies greatly, and close affiliations may be educationally unsound. For example, the type of model family practice center currently required for family practice resident training[17] may be neither successful nor appropriate as a model of academic health center-sponsored primary care.

Family practice, as one of the primary care disciplines, would likely enhance its political clout within the academic health center if it partially abandoned the general practitioner legacy by adding to the generalist numerator (first-contact care) skills a set of new denominator (population-based) practice evaluation and systems management skills. This new approach would offer leadership in practice organization, which is sorely needed, and provide a critical link between clinical and health services research. Technology assessment, bioethics, and the allocation of finite resources are examples of critical health policy issues in which primary care physicians would play an important role.

POLITICAL BATTLEGROUNDS

As the academic health center moves to incorporate more primary care activities into its mission, a reallocation of university or teaching hospital beds and new delineation of privileges for primary care physicians will be necessary. For example, family physicians may desire obstetric privileges in the university or teaching hospital when previously they had these privileges only in a community hospital. Past conflicts over hospital access and privileges that have existed will need to be resolved. General surgical, operative obstetric, and complex intensive care privileges are likely to be the most frequent sources of legitimate conflict. Bed allocations may also force a repricing of university and teaching hospitals' bed charges to be more competitive for contracts with alternative delivery systems. If the academic health center becomes the reference hospital for a series of satellite or outreach ventures, it will have to be as competitive as those community hospitals with which primary care physicians were previously affiliated.

TRADITIONAL MISSIONS OF ACADEMIC HEALTH CENTERS

Family physicians tend to value strongly primary patient care and clinical teaching. Academic centers tend to value most highly biomedical research and technological care. A rapprochement is necessary. In resolv-

ing the clash of value systems, primary care physician faculty may need to make the first move. They may need to demonstrate more appreciation for technological care and more expertise in research if they expect greater institutional support for primary patient care and teaching.

CONCLUSIONS

Academic health centers are subject to the same political, economic, and social forces as are community hospitals. To respond successfully to the new and powerful forces altering health care delivery, academic health centers must become competitive at the same time that new patient care programs must enhance research and teaching missions. The academic health center must help prepare trainees for the new and realistic styles of practice they are likely to encounter. Most solutions to this financial-educational dilemma will require academic health centers to become vertically integrated, providing home, primary, secondary, tertiary, and extended care services. To be successful in this vertical integration, academic health centers will require a new commitment to and considerable enthusiasm for high-volume, high-quality primary care. All levels of provider should benefit from this venture. Bowles[18] has noted that, in this highly competitive era, "maintaining a sufficient volume of patients for balanced education will challenge deans and chairmen . . . (and) some adjustments will clearly be necessary for survival . . .. We have some creative work to do." Building a productive and satisfying relationship between the traditional tertiary care academic health center and primary care disciplines, heretofore barely tolerant, if not strange, bedfellows, will require such creativity as well as a lot of hard work. The benefits of this new relationship described here are more than adequate reward for both the inspiration and the perspiration.

References

1. Rogers DE, Blenden RJ: The academic medical center today. Ann Intern Med 1984; 100:751-754
2. Ebert R, Brown SB: Academic health centers. N Engl J Med 1983; 308:1200-1208
3. Friedman RB: Impact of the evolution in health care delivery on the academic medical center. J Med Educ 1984; 59:539-546
4. Parris M, Stemmler EJ: Development of the clinician-educator faculty track at the University of Pennsylvania. J Med Educ 1984; 59:465-470
5. Schenke R (ed): The Physician in Management. Falls Church, Va, American Academy of Medical Directors, 1980
6. Rabkin MT: Reorganization for systems for primary care delivery. J Med Educ 1974; 49:834-838
7. Grossman JH: Reorganization of ambulatory care in an academic medical center. J Ambul Care Management, May 1982, pp 44-50
8. Hudson JI, Nevins MM (eds): Health Maintenance Organizations and Academic Medical Centers: Proceedings of a national conference. Menlo Park, Calif, Henry J. Kaiser Family Foundation, 1981
9. Pawlson LG, Kaufman RP: HMOs and the academic medical center: A reassessment. Health Care Management Rev, Spring 1982, pp 77-80
10. Hoft RH, Glaser RJ: The problems and benefits of associating academic medical centers with health maintenance organizations. N Engl J Med 1982; 307:168-169
11. Kahn L, Wirth P, Perkoff GT: The cost of a primary care teaching program in a prepaid group practice. Med Care 1978; 16:61-71
12. Bergen SS, Roth AC: Prospective payment and the university hospital. N Engl J Med 1984; 310:316-318
13. Iglehart JK: Moment of truth for the teaching hospital. N Engl J Med 1982; 307:132-136
14. Fink DJ: Developing marketing strategies for university teaching hospitals. J Med Educ 1980; 55:574-579
15. Colwill JM, Glenn JK: Patient care income and the financing of residency education in family medicine. J Fam Pract 1981; 13:529-536
16. Ciriacy EW, Liang FZ, Godes JR, Dunn LD: The cost and funding of family practice graduate education in the United States. J Fam Pract 1985; 20:285-295
17. Essentials of Accredited Residencies in Graduate Medical Education. Chicago, American Medical Association, 1982
18. Bowles LT: The influence of medical practice competition on the academic medical center's educational mission. J Med Educ 1984; 59:605-606