David M. Frankford, JD, and Thomas R. Konrad, PhD

Responsive Medical Professionalism: Integrating Education, Practice, and Community in a Market-driven Era

ABSTRACT

Revolutionary changes in the nature and form of medical practice institutions are likely to reverberate backward into medical education as leaders of the new practice organizations demand that the educational mission be responsive to their needs, and as these demands are increasingly backed by market power. In the face of this pressure, medical education's traditional response—that it should have autonomy in defining its mission—is no longer viable. Instead, more explicit, formal, and systematic linkages between practice and educational institutions are inevitable. The crucial question is whether these linkages will reflect the values of the market, oriented by economic self-interest, or the values of medical professionalism, oriented by the obligation to sacrifice economic self-interest in the service of patients.

The authors maintain that the realization of the normative ideal of professionalism in medical education within the emerging market environment requires that a vision be articulated that is distinct from that of either autonomy or the market, and that combined lay–professional institutions be established to integrate—and perhaps merge—education and practice, and to foster responsiveness to lay values and community needs. The authors conclude by briefly describing examples of current efforts in this direction.

Acad. Med. 1998;73:138–145.

Medical education currently stands at a pivotal point in its history. Outside the doors of educational institutions, new types of medical care delivery organizations are becoming dominant, and the leaders of these organizations are pressuring medical educators and their institutions to be responsive solely to them.[1-4] We have written this article to discuss a crucial question: Will medical educators and their institutions accommodate themselves to these demands from outsiders, or will they articulate an alternative vision to guide how education will be linked to practice and lay institutions?

Mr. Frankford *is professor, Rutgers University School of Law–Camden, Camden, New Jersey;* **Dr. Konrad** *is director, Program on Health Professions and Primary Care, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.*

Correspondence and requests for reprints should be addressed to Mr. Frankford, Rutgers University School of Law–Camden, 217 North Fifth Street, Camden, NJ 08102-1203. e-mail: <frankfor@camden.rutgers.edu>.

In all likelihood, leaders of the new medical care delivery organizations will be both the future employers of students trained in medical schools and teaching hospitals and the managers of networks into which those graduates will be formed. As future employers and managers, these leaders express disappointment with the range and mix of skills, work habits, and resource-use patterns of young physicians they expect to hire or put on exclusive contracts.[1,2] They fault the institutions of medical education, pointing to their orientation toward specialization and the undue emphasis on the use of medical technologies, and a concomitant failure to develop the cognitive skills necessary for primary and preventive care. They view medical education to be a process that produces physician labor, an input for the service-as-commodity production systems that they manage, assemble, or design in the marketplace. They demand that medical education produce the type of physician that satisfies their needs in that competitive, managed care marketplace. Further, these market prescrip-

tions are increasingly backed by the power of the purse, as public funding for medical education is threatened, in good part because of the continuing government fiscal crisis that is widely perceived to be caused by uncontrolled Medicare spending, a major source of funding for medical education.[5]

Educators may continue to articulate a claim to public subsidy,[6] but they must find external resources.[7] More than likely they will need to form partnerships with the new delivery organizations, if only for purposes of obtaining resources. Because these prospective partners will wish to structure these relationships according to the terms they dictate,[3,4] the question is whether medical education will dance to their tune.

As we describe more fully below, the traditional response of medical education to challenges from the external environment has been to claim that the medical profession must have sole authority over the definition and conduct of educational mission. As we also describe below, to some extent this response has worked, as medicine successfully parried demands that education be formally and directly linked to agendas set by others. We argue that medical education can no longer stave off such demands. More explicit, formal, and systematic linkages between practice institutions and educational institutions are inevitable. Moreover, the transformation of practice institutions will reverberate backward into educational institutions. Because the nature and form of practice institutions are now being altered to conform to the dictates and values of the service delivery market, it is quite possible that the educational mission will be dominated by the needs of that market.

The crucial question for medical education is whether it will passively accommodate itself to market imperatives or will act affirmatively, vigorously, and quickly to create new forms of practice to which it will be linked . . . such that medical professionalism . . . can survive and flourish.

In our view, such a result threatens not only the reality but the ideal of medical professionalism, a term we define more fully below. For now, suffice it to say that the key feature of professionalism for physicians is that they should act out of obligation to the patient even when such obligation is contrary to their individual self-interest. Markets, by contrast, teach that self-interest is the dominant value. To reiterate, more explicit, formal, and systematic linkages between the institutions of medical practice and education seems inexorable. This is why we believe that the crucial question for medical education is whether it will passively accommodate itself to market imperatives or will act affirmatively, vigorously, and quickly to create new forms of practice to which it will be linked—indeed, in our view, merged—such that medical professionalism, as reformulated, can survive and flourish. In this article, we offer such an alternative.

Our argument proceeds by three steps.

- First, we describe how market-oriented institutions are attempting to modify the goals of medical education; how medical educators have responded to this pressure with a defense of their traditional autonomy; and why this defense of the autonomy of medical education is no longer viable.
- Second, we examine how the changing institutional framework of practice and education threatens to alter the fundamental values of medical professionalism, especially the obligation to sacrifice economic self-interest in the service of patients.
- Third, to preserve professionalism, we propose an alternative vision of responsive medical education in which institutions of medical education and practice would be merged and act in partnership with communities to create avenues for interchange between professional and lay values.

We conclude the article with examples of initiatives in this direction.

THE THREAT TO TRADITIONAL EDUCATIONAL AUTONOMY

A number of linkages between medical practice organizations and educational institutions have been established in recent years. These range from the purchase of medical schools (e.g., the creation of Allegheny Health Systems, a conglomeration of medical schools and hospital and outpatient facilities); affiliations between organized health service systems in arrangements that represent new modes of socializing medical students for the world of managed care (e.g., the arrangements between Henry Ford Health System and the Harvard Community Health Plan and Case Western Reserve and Harvard Medical Schools, respectively);[8,9] and attempts by the Bureau of Health Professions,[10] the Pew Commission,[11] and the Kellogg Foundation[12] to encourage partnerships between medical schools and community-based

clinics to train medical students and residents. All of these developments may be characterized as ways of making medical education more "responsive" to external institutions (albeit different kinds of external institutions). Different opinions exist regarding the nature of responsiveness and the identity of institutional partners.[13] Nonetheless, it is widely understood that the heretofore-vaguely-stated normative articulation between the medical profession and society ought to be more structured.

Some of these new forms of mediation are efforts to create institutional bridges between medical education and medical practice in the context of an emerging marketplace. Yet, the fact remains that the two institutional sectors facing each other maintain different and often inconsistent views. They disagree, most fundamentally, over who or what is the appropriate representative of patients' interests and values. Such contrasting perspectives in turn affect the natures of their proposed educational reforms.

Organizations acting within the health care market assume that the market is the social process that creates responsiveness, and they therefore fashion themselves as the agents most responsive to patients—who now become "consumers." As the agents generated by the market, these organizations claim that all other institutions associated with the market, including institutions of medical education, should be accountable to them. By contrast, those in medical education who urge responsiveness still understand that it is the medical profession itself that is most accountable to patients. Hence their response exhibits fidelity to medicine's Golden Age. Their efforts, for all the innovation, still consist in the profession's defense of its autonomy,[14] particularly its institutional capacity to reproduce itself in its traditionally autonomous fashion, even as this capacity is being eroded if not eliminated.[15]

This defense of medical education's autonomy espouses a form of individualism, in which the autonomy of the individual practitioner is understood to be the principal vehicle to achieve public good.[16] This individualism has three components:

First, it is simply assumed that a public service ethic grows out of individualistic altruism in which each physician's care for his or her patients automatically results in care for a community.

Second, it is assumed that individual career choices spontaneously produce a "workforce" of the size and shape "required" (i.e., adequate numbers of generalists and specialists of various types). This spontaneous generation purportedly can occur without formal attention to such features of this workforce as its social origins and destinations, or its cultural, demographic, and gender composition, or the shifting claims of other health professions to the territory of primary care.

Finally, and perhaps most important, the underlying assumption is that medical knowledge can be assimilated to medical practice through the actions of individual practitioners. Before entry to practice, the individual practitioner is licensed, thereby ensuring that the individual has learned the necessary knowledge that medical education had to offer. Continuing medical education and periodic recredentialing, in turn, ensure that the knowledge of the practitioner remains current. Hence, even the most isolated practitioner can bring the best knowledge to bear on his or her practice, and no institutional infrastructure is warranted, particularly a formal, explicit, and systematic linkage between medical education and the practice of medicine.

Many of medical education's proposed reforms today continue this individualistic tradition, albeit with some accommodation to the current external pressures. Some suggested reforms,[7] for example, still focus on the education and qualification of individual practitioners through such means as specialty certification. They continue to support limited, usually voluntary, credentialing, as well as processes of continuing, lifelong education. All these mechanisms are attempts to maintain the individualistic version of professional autonomy, while simultaneously justifying the expansion of medical schools temporally and spatially. Even the reorientation of practice toward generalism is often conceived of as an individualistic process, one in which specialists don the mantle of generalism or primary care, an individual choice that likewise preserves individual patients' direct access and free choice.

Perhaps in the not-too-distant past, medical education was successful in defending its autonomy and its self-reproductive capacity, thereby ensuring that its version of individualism was embodied in medical practice. That world, however, no longer exists. Instead, a new version of individualism has arisen, superseding the old one.

The new version is being written by the world of managed care, which, too, espouses the value of individualism but for a far different reason: to avoid facing physicians' collective power. In the view of the corporate health care sector, any professionally autonomous organization—whether a group practice, a medical school, or a state licensure board—is to be avoided or tolerated only with suspicion, while medical education overall is to be driven by an explicitly defined mission that is defined by the market.[4] Professionals, then, as employees or contractors, are to be held accountable as individuals by using such mechanisms as practice profiling, outcomes-based monitoring, economic credentialing, direct capitation of physicians within local markets, and the substitution of cheaper and more compliant forms of labor for the labor of physicians. On the other side of the equation, the power of consumer institutions is to be augmented. The most important vehicle of this augmentation is the application of antitrust laws to medical professionals such that they often risk civil and criminal liability when they act collectively. While these professionals are thus prohibited from

asserting collective economic power, consumers can be freely aggregated into risk pools, thereby allowing corporate entities to assert the collective power of "covered lives" without risking antitrust liability.[17]

In sum, the individualistic definition of professional autonomy in both practice and education is no longer viable. Ultimately, the traditional autonomy of medical education rested on the ability to leverage control over education into the marketplace through dominance of a system of accreditation and credentialing that dictated the forms and nature of practice institutions.[18] Now that purchasers—insurers, employers, and the state—are reformulating practice institutions, the lines of power are being reversed. Users of professional labor increasingly define themselves as customers of medical education and are becoming more skillful both in articulating their demands and in translating them into prescriptive messages concerning the kinds of education they want "produced." Moreover, those prescriptive messages are now backed by substantial market power that can be applied to medical education, ranging from the denial of funding to the outright purchase of educational facilities. There is no reason to believe that those who are successfully transforming medical practice will stop at the dean's door.

Professionalism is not some given of the social world but rather is a normative vision sustained by a particular institutional framework.

THE THREAT TO PROFESSIONALISM

In this context, the conflict between the two visions of individualism may result in the defeat of both individual and collective professional autonomy for physicians. A more important casualty, however, may be that of medical professionalism altogether. Professionalism is not some given of the social world but rather is a normative vision sustained by a particular institutional framework. In the recent past the model of individualistic autonomy in medicine was part of a resource-rich institutional world in which a medical professional could call on social wealth to support such goods and services deemed to be consistent with professionally defined standards of care. Then as now, part of the reason physicians are professional is that they face a conflict between self-interest and obligation to their patients' interests.[19] In the past this conflict played out when physicians faced the choice between self-enrichment by doing more or forgoing such an opportunity in order to remain faithful to their professional obligation. Although many would claim that empirically this normative aspiration was more honored in the breach than not, few would deny that it is a salutary aspiration, and no one would claim in any event that a normative aspiration could be falsified by empirical evidence. Our situation is identical now, if somewhat reversed. Self-interest within the incentives of managed care is promoted by doing less, while obligation might demand doing more. Yet professionalism still remains a potential bulwark against self-enrichment at the patient's expense.

Many have thought professionalism to be dependent less upon the socialization that occurs in medical education than upon the structure of practice institutions.[16] Hence fully integrated organizations such as staff-model health maintenance organizations provide a structure in which professionalism can flourish. They provide regular institutional channels for professional interaction, education, peer pressure, and peer review, which, among other things, moderate individual self-enrichment.[20–22] Such organizations, however, are still few and far between, and are likely to remain so, because the primary vehicle for structuring the new organizational forms—even those integrated delivery systems in which professionals maintain control and share risk[23]—is not full or relatively full integration but the much looser structure of contractual obligation.[24] Professionals working within these newer organizational forms will likely not have the opportunities for the continuous level of professional interaction that is necessary for professionalism to flourish. Moreover, their lines of obligation may follow those of contract rather than the bonds that unite colleagues.

A primary question for medical education thus concerns its role in fulfilling the aspirations of professionalism. It is perhaps unrealistic to expect the market to create organizational structures that nourish professionalism because markets exist to the extent that they feed off of and generate self-interest. Again, professionalism exists to the extent that obligation is chosen over such self-interest.[19] Thus it is not clear what happens to medicine's aspirations of professionalism if students are not systematically trained to resist the dominance of the norm of technical efficiency, and if medical education passively responds to market-generated practice organizations rather than actively participating in creating forms of practice in which professionalism can flourish. Do medical educators really wish to produce physicians ready and willing to participate in the market? Is it really the role of education to respond to the imperatives of technical efficiency? Indeed, do we really want to think of educators as "producers"?

RESPONSIVE MEDICAL EDUCATION AND THE RECONSTITUTION OF PROFESSIONALISM

This compromising of professional norms, however, is not inexorable but would instead result from the medical profes-

sion's continuing equation of professionalism with individualistic professional autonomy. Another course is possible, but can occur—and this point cannot be stressed enough—only if medicine is able to articulate a vision of responsive medical education that is shorn from its past, traditional defense of professional autonomy. This task, which is sketched only programatically here, has two linked components, one being to create a normative vision of what we call *medical professionalism* and the other being to specify the institutions needed to carry out that vision.

Professionalism can survive only if it is . . . responsive to society . . . in a manner quite different from that proposed by current attempts to accommodate medical education to market demands.

Analytically, the normative vision may be divided into internal and external portions. Internally, professionalism must stress values that are distinctive from those that dominate the organization of economic activity in capitalist society.[19,25,26] First and foremost, professionalism must stress the intrinsic value of work, which is then not merely a means to an end but a crucial part of self-definition and contribution to the social good.[26,27] Because personal commitment to work is in part maintained by a sense of personal identity and control, professionalism must also stress that work is not amenable to quantification,[26–28] the process in capitalism through which work is standardized and subject to instrumental control by outsiders. Simultaneously, because individualistic autonomy must cede to professional responsiveness, the control of work must truly rest in a collegium, in which the sense of commitment and control lies in individuals' participation in deliberative processes among equals.[26,29,30] Finally, professionalism must stress that work consists of personal encounters, rather than the anonymous exchange of goods that predominates in capitalism.

Externally, the communication of norms between the medical profession and the larger society would represent the reformulation of the profession's service ideal. Service to an individual patient would no longer represent the sole vehicle for accomplishing social good. Rather, professionalism must stress its openness and ability to incorporate values derived from a larger normative environment (e.g., concern for economy; concern for dignified death), while simultaneously maintaining its crucial role in radiating its values to that environment.[29–31]

The specification of institutions follows from the normative vision. In the past, when professionalism was equated with the ideal of collective and individual professional autonomy, professional institutions were more clearly demarcated from lay institutions. On one side was medical education, autonomously financed and directed, while on the other were payer and political institutions. The two were then linked through practice institutions, largely controlled by the profession through standards of licensure and accreditation.[18] Given this sharp boundary between lay and professional institutions, and given the ideal that the profession should be autonomous, medicine's values tended to become somewhat insular and self-reinforcing.[32] This insularity heightened the tendency for medicine to become defined as biomedicine alone, to the detriment of its broader, traditional role as healer of sick persons, a function necessarily incorporating and fostering human values.[33] An aspect of this narrowing was the socialization that occurred in hospitals, training that perhaps excelled in teaching such skills as differential diagnosis but which also imparted values that slighted attention to generalism, the care of the chronically ill, and the nature of healing.[34]

The growth of markets, then, can be understood as a reaction against medicine's relative normative isolation because markets are, in the normative ideal of "consumer sovereignty," a vehicle through which consumers impose their values on producers. Yet, even were this ideal satisfied, markets actually impoverish the interchange of professional and lay values. First, when consumers demand and producers respond, professionals are reduced to inputs in a production process. In contrast, the ideal of professionalism holds that professionals do not simply passively react to lay values but also play an important role in their generation. Second, markets teach professionals that social relations should be built on self-interest by encouraging them to ask, "How can I get as much advantage over you as possible," rather than asking, "How can I work with you in a partnership whereby together we constitute values to act upon?" Finally, the dominant if not sole value that markets transmit is technical efficiency—in short, the most bang for the least buck. Because bang and buck must be readily quantified and predictable, those human values not easily reduced to currency are ignored. The "solution" of markets, therefore, is the partial substitution of a science of technical efficiency for the science of biomedicine.[28] This substitution actually impoverishes the conversation between professionals and the laity because such a dialogue should canvass the full range of human values and necessarily be qualitative, not quantitative.[29]

By contrast, responsive medical education and profession-

alism would promote that fuller, qualitative interaction by blurring, if not eliminating, the demarcations between professional and lay institutions. Building upon but also extending the characteristics of a good clinical site in which practitioners value high-quality patient care and cost-effective practice, the institutions of responsive professionalism would simultaneously meld education, practice, and responsiveness to lay values (and financing).

Again, analytically we may discuss an internal component and an external component. Internally, education and practice would become merged. Although such reforms as the increased emphasis on ambulatory care in medical education are good first steps, the merger must be more complete. In the ideal, practice would consist of a continuous process of collegial participation in the performance of professional work, as well as collegial participation in reflection regarding that performance.[35,36]

Professional work consists of solving problems that present themselves as "messy indeterminate situations," which call for professional improvisation to account for the similarities to and differences from prior work experiences. Professional competence, then, is composed of "knowing-in-action"—the spontaneous, skillful, dynamic execution of performance, most useful to address similarities with prior cases—but also of "reflection-in-action," used when the professional becomes aware that knowing-in-action is inadequate to address the unique features of a situation and must be supplemented by on-the-spot experimentation in a seamless combination of tacit knowing, acting, and reflecting. Because these competencies cannot be taught but must be learned through doing, professional practice should consist of a process of coaching and learning, in which the two functions reciprocally combine elements of showing and telling in a mutual pattern of reflection-in-action. Further, because collegiality is a key component of professionalism's normative vision, the processes of coaching and learning, showing and telling, would consist of collegial reflection on work. Colleagues would together be engaged in a continuous and mutual process, first, of knowing-in-action through the creation of a communally generated and held repertoire of practice experiences, and, second, of reflection-in-action through individual and collective deliberation on the unique attributes of particular cases. Moreover, professional medical work, including clinical practice, is distinct from the many other types of work that must be learned by doing—such as the work of acrobats, seamstresses, and pilots—by virtue of its unique combination of cognitive, aesthetic, and normative components.[33] Hence, both knowing-in-action and reflection-in-action would also constitute means for continuous practice and education involving the noncognitive elements of medicine, including the manner in which collective ethical knowledge from prior cases is extended to the somewhat similar but ultimately varying new work situations that physicians face daily. In this manner, ethical and aesthetic knowledge are not categorically separate from the cognitive, technical aspects of biomedicine but are combined in the practice and education of medicine.

The external extension of these combined practice and educational institutions continues the goal of attaining constant knowing-in-action and reflection-in-action concerning the cognitive, aesthetic, and normative components of medicine, but brings the laity into this process. Thus the combined practice, educational, and lay institutions of responsive medical education and professionalism would provide numerous avenues for ongoing joint lay and professional deliberations concerning not only relevant clinical skills but also values. Through the formation of these institutions, a joint lay–medical community would incorporate both the financing of education and care and the provision of that care.

MAKING RESPONSIVE MEDICAL EDUCATION A REALITY

To make such institutions a reality, numerous specific tasks must be accomplished. Some good first steps have been taken. For example, one of the Kellogg Partnerships, the Center for Community Health Education, Research, and Service in Boston, ties together ten community health centers and two medical schools, involves both medicine and nursing, and offers an expanded ambulatory care curriculum[12,pp.36,37] It is probably not coincidental that these centers have a long tradition of local support and independent action.[37] As another example, North Carolina's Area Health Education Centers (AHECs) program has been structured from its inception to meld education and responsiveness to regionalized rural areas.[38,39] Almost singular in that regard is the Area L AHEC, which is one of the nine AHEC centers in the state. This particular AHEC, which serves a five-county rural area characterized by some of the nation's most challenging economic and health conditions, was founded in 1972 as a not-for-profit foundation and is governed by a community-controlled board of trustees representing local health institutions and county governments. The AHEC works with the statewide Office of Rural Health, community colleges, all four medical schools in the state, and other health science schools both within and outside North Carolina. Currently, over 200 students per year rotate through various local facilities and medical practices in the area, thereby taking advantage of clinical sites to train students. In turn, the students are resources for community practices. This structure encourages the development of long-term relationships between students and community physicians, which in turn enhances continuing education of community practitioners, models interprofessional cooperation, and provides a mechanism for attracting new health professionals to the region's underserved communities.[40]

Yet lay participation in knowing-in-action and reflection-in-action, and the merger of education and practice, must extend to an even greater range of cognitive, aesthetic, and normative topics and be institutionalized through many more points of contact before responsive medical education can become a reality. Necessarily, rigorous comparative and historical analyses should be employed to identify aspects of current experiments and of other institutions that might facilitate the actual development of this alternative vision of professionalism and combined lay–professional institutions. The discussion must also move quickly toward implementation strategies lest the project be dismissed as utopian. Yet the first and most basic task—identifying the general nature of the path to be taken—is what spurred us to write this article. The medical profession must recognize that traditional individualistic professional autonomy is no longer a viable path; in the face of market imperatives, professionalism can survive only if it is reformulated. It must be more explicitly responsive to society, but responsive in a manner quite different from that proposed by current attempts merely to accommodate medical education to market demands. As sympathetic lay observers, we may be in a position to identify the general nature of what should be done. However, as Otto Guttentag remarked in an analogous context, members of the medical profession, who are the participants in the task of caregiving, "are the best persons to delineate the intricacy of the task."[41]

The research upon which this article is based was funded in part by cooperative agreement U76 MB00005-02 from the Health Resources and Services Administration's Bureau of Health Professions. The authors acknowledge the helpful suggestions provided by Thomas Bacon, Eric J. Cassell, Susan Hannan, and Conrad Seipp on an earlier version of the paper, as well as the inspiration and encouragement of the late Dr. Eugene S. Mayer. The authors accept sole responsibility for the contents of the article.

REFERENCES

1. Gold MR. Effects of the growth of managed care on academic medical centers and graduate medical education. Acad Med. 1996;71:828–37.
2. Bulger RJ. Generalism and the need for health professional educational reform. Acad Med. 1995;70(1 Suppl):S31–S34.
3. Blumenthal D, Thier SO. Managed care and medical education: the new fundamentals. JAMA. 1996;276:725–7.
4. Gumbiner R. Perspectives of an HMO leader. Inquiry. 1994;31:330–3.
5. Krakower JY, Ganem JL, Jolly P. Review of US medical school finances, 1994–1995. JAMA. 1996;27:720–4.
6. Cohen J. Why should the public help pay to educate doctors? Acad Med. 1996;71:903.
7. Association of American Medical Colleges. Taking Charge of the Future: The Strategic Plan for the Association of American Medical Colleges. Washington, DC: Association of American Medical Colleges, 1995.
8. Moore GT, Inui TS, Ludden JM, Schoenbaum SC. The "teaching HMO": a new academic partner. Acad Med. 1994;69:595–600.
9. Karp S, Langschwager L, Gamliel S, Fernandez ES. The need for comprehensive data on educational affiliations between academic health centers and managed care organizations. Acad Med. 1997;72:341–6.
10. Council on Graduate Medical Education. Sixth Report: Managed Health Care: Implications for the Physician Workforce and Medical Education. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, 1995.
11. Pew Health Professions Commission. Health Professions Education for the Future: Schools in Service to the Nation. San Francisco, CA: Pew Commission, 1993.
12. Richards RW (ed). Building Partnerships: Educating Health Professionals for the Communities They Serve. San Francisco, CA: Jossey–Bass, 1996.
13. Friedman E. Managed care and medical education: hard cases and hard choices. Acad Med. 1997;72:325–31.
14. Christakis NA. The similarity and frequency of proposals to reform US medical education: constant concerns. JAMA. 1995;274:706–11.
15. Bloom SD. Structure and ideology in medical education: an analysis of resistance to change. J Health Soc Behav. 1988;29:294–306.
16. Freidson E. The Profession of Medicine. New York: Dodd Mead, 1970.
17. Frankford DM. Creating and dividing the fruits of collective economic activity: referrals among health care providers. Columbia Law Review. 1989: 89:1861–938.
18. Freidson E. Professional Powers: A Study of the Institutionalization of Formal Knowledge. Chicago, IL: University of Chicago Press, 1986.
19. Parsons T. The professions and social structure. In: Essays in Sociological Theory. Rev ed. New York: Free Press, 1954:34–49.
20. Berkowitz ED. Group Health Association: A Portrait of a Health Maintenance Organization. Philadelphia, PA: Temple University Press, 1988.
21. MacColl WA. Group Practice and the Prepayment of Medical Care. Washington, DC: Public Affairs Press, 1966.
22. Smillie JG. Can Physicians Manage the Quality and Costs of Health Care? The Story of the Permanente Medical Group. New York: McGraw–Hill, 1991.
23. Showstack J, Lurie N. Leatherman S, Fisher E, Inui T. Health of the public: the private-sector challenge. JAMA. 1996;276:1071–4.
24. Gold M, Hurley R, Lake T, Ensor T, Berenson R. Arrangements Between Managed Care Plans and Physicians: Results from a 1994 Survey of Managed Care Plans. Washington, DC: Physician Payment Review Commission, 1995.
25. Parsons T. Professions. In: Sills DL (ed). International Encyclopedia of the Social Sciences. Vol. 12. New York: Macmillan, 1975:536–47.
26. Freidson E. Professionalism as model and ideology. In: Nelson RL, Trubek DM, Solomon RL (eds). Lawyers' Ideals/Lawyers' Practices. Ithaca, NY: Cornell University Press, 1992:215–29.
27. Frankford DM. Managing medical clinicians' work through the use of financial incentives. Wake Forest Law Review. 1994;29:71–105.
28. Frankford DM. Scientism and economism in the regulation of health care. J Health Politics, Policy and Law. 1994;19:773–99.
29. Sciulli D. Theory of Societal Constitutionalism: Foundations of a Non-Marxist Critical Theory. New York: Cambridge University Press, 1992.
30. Frankford DM. The critical potential of the common law tradition. Columbia Law Review. 1994;94:1076–123.
31. Emanuel EJ. The Ends of Human Life: Medical Ethics in a Liberal Polity. Cambridge, MA: Harvard University Press, 1991.
32. Freidson E. Professional Dominance. New York: Atherton Press, 1970.
33. Cassell EJ. The Nature of Suffering and the Goals of Medicine. New York: Oxford University Press, 1991.
34. Cassell EJ. The Healer's Art. Cambridge, MA: MIT Press, 1976.
35. Schön DA. Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco, CA: Jossey–Bass, 1987.

36. Schön DA. The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books, 1983.
37. Young D. A Promise Kept: Boston's Neighborhood Health Centers. Boston, MA: Trustees of the Health and Hospitals, City of Boston, 1982.
38. Mayer ES. AHEC in North Carolina: The Principles behind the Program. Technical assistance workshop, 1985 Sept. 10. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, 1985.
39. North Carolina Area Health Education Centers Program. Medical Education and Medical Manpower in North Carolina. Chapel Hill, NC: North Carolina Area Health Education Centers Program, 1987.
40. Thomas J. Bacon, Dr.PH, director of the UNC AHEC Program, Chapel Hill, NC. Personal communication, October 10, 1997.
41. Guttentag OE. The Attending Physician as a Central Figure. In: Cassell EJ, Siegler M (eds). Changing Values in Medicine. Lanham, MD: University Press of America, 1979:107–26.

Correction

There was a layout error in the January 1998 Book Reviews (pages 104–106). The reviewers, Ken Braslow and Hugh Hill, each reviewed both of the books under consideration. Therefore, the titles of the two books, *Get Into Medical School! A Guide for the Perplexed* and *The Definitive Guide to Medical School Admission*, should have appeared above each of the reviewers' names.