Some of us in the pharmaceutical industry watch the making of physicians in the modern academic health center with admiration tempered by self-interest. But, we are more than a little concerned. Thus, it is tempting, having read the essay by Robert Ebert and Eli Ginzberg, to focus only on what is wrong with the American system of medical education. In fact, as the essay implies, there is much to be pleased with in our current system. While I have no difficulty in supporting change, I recoil a bit at supporting the proposed reform, at least in its focus and emphasis.

Good Clinical Judgment

One cannot review what a medical student is expected to master and not be impressed with what these talented young people, for the most part, manage to assimilate. Gaining experience is another matter. How that experience is gained is crucial to the evolution of good clinical judgment. Time and exposure are important. Guidance is essential. Thus, Ebert and Ginzberg suggest a mechanism that they believe would strengthen the ability of faculties to perform the vital functions of teaching and supervision.

Schools of medicine, more than most professional schools, have been favorite targets for social engineering. While it is useful to have graduates responsive to social concerns, it is essential that the main focus of faculties be on preparing the individual to make good clinical judgments. This requires substantial technical preparation and supervised experience in various settings with patients of all kinds, in various conditions of health and illness, who are undergoing a variety of evaluations and treatments. It is reasonable to recognize that numbers of years or grouping of experiences could be modified without sacrificing the capability of developing a competent yet compassionate physician.

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I used to think I knew how to get an evaluation of what constituted good clinical judgment. Today I am not so sure. There is a place for protocols, and norms have a value, but neither substitutes for good clinical judgment based on knowledge and a commitment to a particular patient. Of course, these protocols and norms and formularies and productivity schedules are not supposed to substitute for the physician's judgment. Ask any lawyer. Yet there seems to be a call for teaching doctors to use such instruments as vehicles for arriving at better and maybe safer judgments.

Independent clinical judgment used to be the mark of a mature physician. It seems now we are to teach team practice. If teams are to be viewed as management devices, is not responsibility diffused? Is not accountability obfuscated when there is management by committee? The authority no longer is with the doctor, just the liability.

For many years there has been a call for the medical curriculum to include economics. Indeed, I presume many students are now being made "sensitive" to the so-called real world by having an administrator, an economist, or even a doctor tell them how much things—particularly tests and drugs—cost. This new sensitization has not caused a dramatic decrease in the escalation of health care costs. In fact, until the aspirations of the public are reconciled with available resources, dissatisfaction with the health care system will continue to fester. Instead of managing physicians and attempting to make them businesspersons, we need to manage the public and their representatives in Congress so that expectations are in line with resources.

**Need For Primary Care Physicians**

For some time, there has been a call for more primary care physicians. Ebert and Ginzberg suggest reduction of nonprimary care residency positions. Reduction in choice always presents difficult questions of access and equity, however. An alternative is to increase the compensation of primary care physicians to levels not so far distant from the levels enjoyed by the nonprimary care specialists.

While it is true that some subspecialists have little trouble attracting interest, some areas of specialization receive little interest. I have in mind, with more than a little self-interest, the clinical pharmacologist. Why is it that, in our system of medical education, interest in clinical pharmacology is relatively low, compared to a substantial standing in the United Kingdom? Is this a significant enough problem for the educational establishment to be concerned about? If it is, the reform proposal would refer the issue to the core faculties for consideration, I presume. Yet, the
same people have not responded before to the same call.

The unresponsiveness of core faculties has two reasons, I suspect. First, questions directly related to clinical pharmacology do not appear frequently enough on national qualifying examinations. Second, the specialty has not had a strong source of reimbursement for service or research activities.

These two deficiencies could be fixed. Fixing the first is a matter for the qualifying boards of examiners. The pharmaceutical industry is showing an important way to the second. Clinical pharmacologists are in demand in the pharmaceutical industry, so much so that the industry is gently chided for depleting the ranks of good teachers and good scientists from academia. The industry needs well-educated and well-trained clinical pharmacologists. Here is an opportunity for medical educators who do not seem to know what to do with their graduates. Incidentally, there are other segments of society and the health care system that need more physicians, not fewer. The requirement to take advantage of those opportunities is to make positions attractive somehow. The first step is by setting an example of positive attitudes. We cannot expect to interest young people in areas that are ignored, shunned, or denigrated by core faculties. The second step is to make the positions economically viable. Industrial positions, whether in clinical investigation, clinical pharmacology, or occupational medicine, are available, and they usually are financially attractive. Government positions for physicians and scientists need to be restored to competitive scales of compensation. Physicians are needed by the U.S. Public Health Service, the military services, and state and local health agencies. The educational system should be preparing physicians for a wide spectrum of careers, not just those in managed care systems.

There is a particular need for physicians in underserved areas. This challenge to medical educators is not based on curriculum modification; again, it is in attitude. I am not advocating that academic health centers be given direct responsibility for what is a growing health service problem of major dimensions. The solution will require realistic financing programs in which the federal, state, and private sectors participate. The program must assure adequate physician reimbursement provisions to help redistribute the physician pool. New policies for the underserved thereby could help stabilize the academic health centers by providing additional opportunities for physicians.

Cost Of Medical Education

Medical education is too expensive—for the student, for the universi-
ties, and for society. Medical school costs, at least, are too large. The idea that the costs need to be unbundled is a good one. The debate about allocations of costs would be interesting, indeed. Accreditation committees would have to be reoriented. Examiners would have to be retrained. For example, great weight is accorded the research environment in site visits. The point is that university and academic health center management and faculties respond to the requirements set by the accrediting bodies. Why not challenge these bodies to agree to limits, design them, and set the accounting rules for cost allocations for medical education? Ebert and Ginzberg apparently feel that faculties can do this by taking the initiative, exhibiting leadership, and leading a movement of reform. Maybe so. It seems to me that the accreditation groups and their parent associations and professional societies could facilitate redefinition of realistic minimum allocations for educational needs.

It is the cost of medical education that is largely responsible for sidetracking interest in medical education. Unfortunately, the talented individuals from poor families are most influenced. The nation cannot afford this particular loss from the talent pool. Not only will we forgo outstanding physicians and biomedical scientists, we will further alienate large segments of our citizenry. Bootstrap operations and self-help initiatives go wanting when access is barred. And high cost is a barrier, a large and growing one. It is not in vogue to advocate new public programs to finance education for physicians. Nonetheless, if I were to have to choose between two evils, I would favor direct grants for qualified students from low-income families. Loans will not suffice. Rising physician incomes are not sufficient reason to reject support.

Perhaps it is time to redefine the various responsibilities, authorities, and liabilities of physicians. As the authors point out, some of these are changing. The reasons for the change have been based largely in perceptions of not getting one's money's worth. It is not strange that this implication of reduced quality is attributed to deficient doctors with deficient preparation for practice, rather than on changing aspirations, expectations, and societal values. Surely, the priesthood was never meant to be sainthood. Surely, the profession of medicine was not meant to be a competitive business, either. We must guard against inadvertently changing our programs in medical education to programs of business administration and management.