

HEALTH SERVICES AND THE ROLE OF THE MEDICAL SCHOOL

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In a short period of time, a rapidly developing national concern with the delivery of health care and the identification of medical schools as a resource capable of leadership in this field are being thrust together in a new program that could greatly influence the organization, quality and direction of health care in the United States. Legislation has been enacted by the Congress requesting the aid of medical schools in planning, guiding and coordinating efforts to achieve cooperation among physicians, hospitals and others in improving the delivery of health care.¹ Medical schools are now challenged to define their responsibilities on a broader social scale and to accept a leadership role in evolving more effective ways of providing health services and care. These circumstances literally force a reconsideration of the role of the medical school with respect to health services.

DELIVERY OF HEALTH CARE

“The ultimate test of our health system,” as seen by the panels on health care at the recent White House Conference on Health, “is that our new knowledge be *delivered* . . . as prevention, promotion and care.”² The panels dealing with education acknowledged an inadequacy and insufficiency in the delivery of health care as a responsibility of education.³ The delivery of care has become one of the foremost problems in the field of health. Although the calculus of such matters is inexact, the gap is widening between the growth of knowledge and methods of application. The vigorous movement in overcoming the

economic impediments to care under private and now public insurance also necessitates greater attention to the delivery as well as the distribution of care. The Heart, Cancer and Stroke program came not only in the aftermath of Medicare, but also as a consequence. In turn, President Johnson has proposed a massive new program to assure the availability of facilities and an additional program of grants for research and demonstration projects in the organization, financing and delivery of health services.⁴ Still further attention both public and private to the matter of application can be anticipated.⁵

No more forceful case for improving the application of medical knowledge to the care of people has been made in recent times than the report of the President's Commission on Heart Disease, Cancer and Stroke. Its very words epitomize "the rising expectations" of the public (and incidentally stimulate these expectations as well):⁶

Our nation's resources for health are relatively untapped. The rising tide of biomedical research has already doubled and redoubled our store of knowledge. . . . We stand on the threshold of still greater breakthroughs. . . .

Yet for each breakthrough, there must be followthrough. Many of our scientific triumphs have been hollow victories for most of the people who could benefit from them.

Each premature death . . . is a personal tragedy. But each *preventable* death is a national reproach. Every year, more such preventable deaths are occurring—for the pace of science is bringing more within our reach, but the pace of application allows them to slip through our grasp.

And in its deliberations Congress accepted the belief that: "Just by applying the knowledge we now have we could save one-half the lives of the people who contract cancer."⁷

Viewed in less simplistic terms than the reduction of the number of deaths, the prevention of disease, the provision of the best possible care and the maintenance of people with chronic illness pose the same challenge, if less dramatically presented.

The program proposed by the professional and public leaders who made up the Commission was as sweeping as were its premises. Calling for "the immediate reduction and ultimate conquest" of diseases accounting for "more than 70 per cent of the deaths in this country," it proposed a "national network" of regional centers, the construction and operation of facilities, research and training with universities playing a central role. And although Congress did not enact the entire program, the central premise that something needs to be done "to improve generally the health manpower and facilities available to the Nation" was written into law.

EMERGENCE OF MEDICAL SCHOOL RESPONSIBILITY

The idea of coordinating agencies in each region to evaluate and integrate existing preventive and curative medical service and to plan for progressive developments is not new; it was proposed 34 years ago by the Committee on the Costs of Medical Care,⁸ but not successfully established. What is conspicuously new is the role the legislation assigns to "universities, medical schools, research institutions" and other educational agencies. The Committee on the Costs of Medical Care did not regard medical schools as a likely participant, much less a leader in such endeavors, and contented itself with recommending to the schools that they devote increasing emphasis to educating physicians in the prevention of disease, that they pay greater attention to the social aspects of medical practice, that they engage in postgraduate education. To become a resource that the nation could turn to for leadership to plan for better medical care presupposes a change in the character of the medical school. For, notwithstanding the truism that patient care is the "raison d'être" of medical education,⁹ service has ranked as an insecure third among the primary functions of the medical school.

As recently as mid-century things remained much as portrayed by Deitrick and Berson in their volume.¹⁰ Although service had become "the third major activity of a modern medical school," the increasing demands it posed and attendant financial problems were—and still are—approached apprehensively. Some expansion of medical school activity in the community had evolved and had proved productive. Further growth of such activities was foreseen, but was regarded as "a radical change in the fundamental concept of a medical school." The medical schools, it said, "are developing into medical-service centers with constantly expanding responsibilities in the health field. Not only does the public expect these institutions to set standards of medical care, but in addition it expects them to provide and supervise the hospital care for large population areas as well as for national medical-service programs." The "already enormous and rapid growth of the service activities of the medical schools," it commented, "is a drain on the time and energy of the faculties and on the finances of many schools. The extension of service activities beyond those needed to support a medical school's educational program already threatens the education of the medical student." Warnings continued against "building up large empires which serve as welfare and semicharitable institutions, steadily spreading their influence and control over many segments of health

care." Should this be the role of an educational institution? "These expansionist policies," Dietrick and Berson claimed, "would seem unwise when they are judged in relation to the present facilities and resources of the medical schools." The book concluded with a call for greatness that, it said, "must not be lost in a welter of service, research, training and welfare functions." This is cited not as a critique, but as an accurate and recent reading of problems and attitudes.

Another study conducted in 1961–1962 encountered a number of medical schools that "felt little or no responsibility toward the community. There are, however, noteworthy examples to the contrary." Although the medical school "should give leadership in demonstrating the best patient care," the study observed a "lack of a clear concept of specific responsibilities that the medical school or the affiliated hospital had recognized and accepted as its special contribution."¹¹

Faculties of medicine, however, have become deeply involved in teaching hospitals where the co-mingling of care, teaching and research has created great medical centers. But as Lowell T. Coggeshall, Vice President of the White House Conference on Health, commented in Panel Summaries, that is "primarily an educational rather than a service function. . . ."¹²

The explosion of medical research, moreover, has expanded the schools' capacity to contribute to care by increasing the body of knowledge to be applied. In large part responsible for this development, the medical schools would appear also to be at least partly responsible for seeing that the expanded knowledge actually accrues to the benefit of the people. The course and content of medical research is determined largely by the members of the academic community. One measure of the extent of the interest shown so far in the organization and delivery of health services is the less than one-half of one per cent of medical research funds spent for studies directed to this purpose. That proportion or disproportion has been cited as a reproach.¹³ The successful collaboration of the medical school and government in biomedical research suggests at least the possibility of similar collaboration in improving care.

Abraham Flexner had criticized the medical schools for failing to notice when the vital features of the apprentice system had dropped out. "They continued," he said, "along the old channel . . . no consistent effort was made to adapt medical training to changed circumstances."¹⁴ The medical schools of today do not seem to be similarly

insensitive. On the contrary, perhaps forewarned, their leadership is demonstrating an awareness of changed circumstances.

In a series of successive statements, medical educators, and in particular the leaders of the Association of American Medical Colleges, have stressed the need for adaptation. Such statements were most clearly crystallized in the report *Planning for Medical Progress through Education* by a committee of the Association of American Medical Colleges under the chairmanship of Lowell T. Coggeshall. That Committee considered the changes in the medical schools' whole environment. "The important question for the future," it concluded, "is whether the present system is sufficiently flexible and imaginative to keep pace with the contemporary revolution in medical science and the changing expectations of the people of America." Foremost among the "outstanding implications" for keeping pace—of the most profound significance for the field of medical education today—it placed the need "to assume responsibility for meeting the quantitative as well as the qualitative needs of the nation and individual states and communities." It urged medical education to turn its attention to the delivery of health services in three ways: "First, those in the field of medical education themselves need to devote greater attention to studying how health care can best be provided; second, they need to teach medical students and young physicians to provide health care in the ways that are most effective medically and efficient economically; third, the medical school of the future can contribute significantly to the health field by providing the 'model' or 'demonstration' of how health care can best be delivered."

The recommendation that "the schools of medicine should be taking the lead in studying the ways medical care is delivered to patients" would seem to have directly paved the way for their participation in the Heart, Cancer and Stroke program.

THE HEART, CANCER AND STROKE PROGRAM

Medical schools formally welcomed the program and expressed their willingness to participate in it. The testimony of the Association of American Medical Colleges before the Congress also indicates the contributions that medical schools can make:¹⁵

We feel that it was wise to envision that the regional medical complexes should be developed around medical schools, which really means around

great medical centers devoted to teaching, research, and quality patient care. For in these centers are concentrated . . . the intellectual leaders in medicine and the bulk of the young physicians in training. Here will be found, too, the experienced professional and administrative manpower . . . to develop an organized plan for a coordinated program of teaching demonstrations, consultations, research, and research training in order to assist physicians and hospitals within their area to bring to their patients the latest advances in prevention, diagnosis, and treatment of these diseases. This is one of the important functions of a university medical center and this program will provide the opportunity for an important extension of this function. Furthermore, the movement of the great medical educational centers toward a greater social responsibility for the health of the population, will in all likelihood, have an extremely favorable impact on the education of future physicians.

Nevertheless, many a faculty held and still hold serious reservations not only about overcommitment of scarce resources, but about the direction of the program. They object to "crash programs" and "directed research." Great confusion about the provisions still persists. Monumental and fundamental disagreements are voiced against the report of the President's Commission. Some of these are typified by Richard Magraw, who seems to assume that the report itself "was enacted into law."¹⁶ Magraw criticizes its categorical or disease-centered approach as "mechanistic." He is concerned that the law is designed more for "funneling patients into the center than for disseminating expertness to the community." He fears that its ideas could be "deeply disruptive of medical care, the patterns of service and medical education unless great care is taken to implement them wisely and to secure the genuine acceptance and cooperation of practicing physicians." He expresses concern for a hardening of the attitudes of practicing physicians against government participation in medical care and for mistrust between faculties and practicing physicians. He concludes:

And although many patients suffering from these prevalent diseases might receive improved overall care, nevertheless because of the disruptions involved, such implementation could also have a deleterious effect on medical care in general and thus on the health of the American public.

These views are still widely held. Many are not aware of the fact that the report was not enacted into law. A reciprocating relationship between centers and their related communities is actually intended. The chances of disruptions have been largely reduced by various assurances against interference, possibly to the detriment of a program seeking to improve the delivery of care. Eventual enactment of the en-

tire program, however, was advocated by the administration in its testimony.¹⁷ Accordingly, many regard the present law as a first step toward the full program and look to the report as a guide to what is coming in the future.

DEFINING THE MISSION

Public Law 89-239 was thus born amid greater than usual confusion and apprehension. It has been called a program in search of a mission. This formulation is engaging, but not entirely accurate. For in spite of many ambiguities, the program does have a mission: its stated purposes—condensed, rephrased and rearranged—emerge as a desire to improve the health manpower and facilities available to the nation. The program hopes to afford a better opportunity to the medical profession and to medical institutions for making available to patients the latest advances in the treatment of heart disease, cancer, stroke and related diseases. That is to be accomplished by establishing cooperative arrangements for research, training and demonstrations of patient care. The act does not advance a blueprint of how that is to be accomplished, and in this it is unusually vague. If the vagueness had not been intentional, it would ordinarily have been grounds for dismissing the entire measure. The invitation to innovation and improvisation has made a great many people uneasy, especially those who would have been relieved to receive orders. However, in a field where new ways have to be found, that can be one of its most ingenious provisions and the source of its greatest strengths. The law comes to full concreteness only in the institutions to which it turns to accomplish its stated aims.

However, serious and substantive ambiguities occur in the statute and its history which, in addition to the lack of a "blueprint," make it an especially difficult law to interpret and to implement. In the very sentence that expresses the intention of improving manpower and facilities, the stipulation is added that it must be accomplished "without interfering with the patterns, or the methods of financing of patient care or professional practice, or with administration of hospitals." That "overriding principle,"¹⁸ as it was called, was highlighted as an amendment to make the bill less objectionable. To further reassure those fearing federal control of medical practice, the word "cooperation" was substituted for coordination. The funds are not to be used for patient care, except incidentally as involved in research, training or demonstration. No patient is to be furnished care unless referred by a

practicing physician. Rather than the complexes originally proposed, existing facilities are to be used. Construction is to be confined to alterations and renovations of existing buildings and replacement of obsolete, built-in equipment. No new construction will be approved. These changes headed off the thrust of the original proposal to create new centers and redirected the program toward regionalization of existing resources. They also require the regionalization to be voluntary and evolutionary. Clearly, the framers of the act decided, at least for the time being, to pin their hopes on cooperation; they did not frame a grand design but sought to encourage the evolution of various patterns.

PLANNING

Congress has cautioned against "hastily planned programs, which would inevitably lead to poor performance . . . if this program were implemented quickly upon too large a scale."¹⁹ Such haste does not appear to be a clear and present danger. Many of the activities thus far have been solely devoted to orientation—"planning to plan"—and setting up agencies for that purpose; to initiating applications for grants; and to trying to define the problems in each region. Many jurisdictional problems are posed in defining and developing valid regions for planning health care. The program offers opportunities for establishing and testing natural medical service regions.

The steps already taken and those being planned indicate the initial directions and tendencies of the program. Fact-gathering is a necessary starting point; inventories of manpower and facilities required for regional planning often do not exist; valuable information will undoubtedly be collected on the patterns of practice, the quality of care and other matters which can be useful for the further planning and development of health services. Excellent opportunities are provided to explore the actual gaps between advances in medicine and their application and to take this crucial issue out of conjecture and rhetoric, collecting in the process experience on how application can indeed be improved and made most effective. In forming organizations to plan and in convening the various parties specified by the law—practicing physicians, medical center officials, hospital administrators, representatives of medical societies, voluntary health agencies and others—a common understanding of some of the problems can be achieved. Even in the early operating stages, valuable programs of continuing education of physicians and other personnel can be achieved as can research and

demonstration programs of improved patient care. Community hospitals can be strengthened by working out better relationships between them and the university teaching hospitals.

The medical school can help in all of these endeavors. It is reasonably well qualified and well experienced in such matters; it is the source of the knowledge that needs to be better applied. It is the only institution that embraces teaching, research and community service. Together with the resources of the rest of the university, it can provide basic, specialized and continuing education and participate in the planning, implementation and evaluation. Above all, it has access to the needed trained manpower and this may well be a governing factor.

At the same time, this is a new activity for medical schools and new resources and competencies will have to be developed. Medical schools have not devoted themselves to dealing with the need, demand and utilization of health services and with the health of populations. They have not developed strength in the social and behavioral sciences or experience in efforts to implement social legislation, and they have inherited a tendency to insulate themselves from everyday medical care and to avoid conflict with practicing physicians.

As the program moves into the central stage of regionalization it will enter a crowded arena with handicaps as well as advantages, some of them inherent in the legislation. Planning is proceeding on many fronts, from the individual institution to the national government, with differing aims as well as auspices. The planning itself is largely uncoordinated and fragmented.

One type of planning seeks to restrain needless construction of hospitals and to limit the flood of high-energy radiation, cardiac surgery units and the like. Although voluntary restraints have been attempted in hopes of reconciling the needs of the individual institution with those of the community, some do not accept the community's needs as governing. In New York State, the legislature found it necessary to do precisely what Congress wanted to avoid in the Heart, Cancer and Stroke program—to intervene. In 1964, the Metcalf-McCloskey Act was passed requiring that before new hospitals or beds could be built, regional councils consisting of representative agencies must certify the community need for the new construction. The law was extended the following year so that before construction is approved or special equipment installed, consideration is to be given to the available facilities, services and equipment that could serve in its stead. That was necessary legislation in New York and it is likely to spread.

Another axis for planning—that, for example, under the Hill-Burton program—derives its authority from the ability to spend or allocate funds. Under the Heart, Cancer and Stroke program, the financing of care and facilities will be unchanged.

A planning process that does not come to grips with the issue of authority or the placement of facilities and allocation of funds according to community needs would seem to abandon the more effective means thus far devised for achieving regionalization. Thus, at first blush, the new program may not appear to be a particularly promising venture into planning. The medical school may be a prestigious convening body, but the agencies involved have occasions enough to come together and have not failed to plan because of lack of opportunities to meet.

The involvement of the medical school, however, in the Heart, Cancer and Stroke program does offer opportunities for advancing the planning of health care that should not be overlooked. Mechanisms of restraint are certainly needed, but they are not necessarily the best tools for encouraging significant innovations in medical care. The Heart, Cancer and Stroke program invites a new kind of planning directed specifically at improving the general delivery and level of care. Though fragmented in part by the disease categories within its jurisdiction, the program is not limited to hospital care but can address itself to health services in their totality. The program, in fact, has one of the broadest mandates ever granted to plan for improved care.

The medical school, and particularly the university, can make another contribution: with its aid and the participation of all involved, the universities can help think through the requisites of planning health care. They can address themselves to such questions with less of a proprietary stake than can other agencies: Do the right kind of agencies exist and if not, how can they be devised? Are the right functions being assigned to planning agencies and if not, what should they be? Just what is planning and what are controls and how is each to be accomplished? Which aspects of planning can be privately and which need to be publicly exercised? Can health care planning be better coordinated with other kinds of planning? Can it draw on the experience in other fields? How can these planning efforts come together?

This may appear to be far afield from the promises of immediate reduction and ultimate conquest of these diseases promised by the President's Commission. The caveats against haste need to be weighed against the possibility of public disappointment with what may appear

to be little progress and limited goals compared to the bold promises and high aspirations of the President's Commission. The complexity and controversiality of the field may inspire study rather than action. The likelihood is that enthusiasm will be generated in many places for essentially the same data. A careful coordination and evaluation of data-gathering will be needed to unify the study process and to avoid studies offering little additional knowledge beyond minor variations of the same themes. Clearly, it will be important to nurse the program into its operating phases. Otherwise quick solutions will likely be sought, such as a possible reversion to building "centers" as tangible evidence of action. That possibility needs to be firmly faced, not as a concession to irrational expectations, but as a response to that large component of medical knowledge that is still poorly applied.

Congress said that:

It would be desirable as an ultimate goal for all medical schools to be involved in programs of the sort contemplated by the reported bill, but some may choose not to participate, and others may become involved in the program at a later stage.

Clearly, the new program will greatly enlarge the medical schools' participation in health care. The effect of a program that is national in scope, the inducements of grants and the declaration of public desire will lead them into a general and greater involvement.

However, in addition to these actions in the public arena and to these inducements and invitations of the national program, medical schools are also likely to become more deeply involved in medical care out of internal promptings and out of external forces that have become internalized.

COMMUNITY LABORATORIES

In his autobiography, Abraham Flexner remarked that he had found five criteria to be conclusive in establishing the quality of a medical school: 1. its entrance requirements; 2. the size and training of its faculty; 3. the sums available to support the institution and the uses to which they are put; 4. the quality and adequacy of its laboratories and the qualification and training in the preclinical branches; and 5. the relations between the medical school and hospitals.²⁰ For some time, it has been becoming increasingly evident that another criterion must be added: that a medical school must provide instruction not only in hospital care, but also in the whole spectrum of clinical services.

That student, physician and medicine itself suffer from lack of such exposure and instruction was well stated in 1952, by a faculty committee at The Johns Hopkins University:²¹

This lack of a body of patients for whose total care the clinical departments might be responsible constitutes a real handicap to the teaching program of the school. Our students do not have now sufficient opportunity to observe the early symptoms and signs of illness, a first acquaintance with which is so important to them as future practitioners, nor do they have opportunity to see what happens to their patients after they are discharged from the hospital. The Committee is convinced that if this lack could be supplied by having the Hopkins medical institutions assume the responsibility for the total care of a conveniently located group of families, the clinical departments would then have the patient material with which to conduct more effective instruction, not only in the prevention of illness but also in its recognition and treatment. Moreover, the establishment of such an activity on a firm financial basis that ensured its continuity of operation would add to this environment a research facility of great potential value which could be made available to the faculty.

To begin to provide such instruction, medical schools have attempted a scattering of comprehensive medical care and family care programs. The development of community laboratories in which the medical center undertakes responsibility to establish and evaluate medical service programs for their own sake or out of a community responsibility has been slow. Innovations of this kind are not easily made by or in institutions whose very excellence in what they do now constitutes a barrier to undertaking new enterprises. With some exceptions, those most successful in the classical functions have been least inclined to entertain new ventures. What experimentation has been done has often been carried out by the "weaker" schools. Community laboratories, however, have often been considered. Now the necessity for thoughtful, responsible planning and action has been thrust on all medical schools.

The university laboratory in the community can become a pivotal resource for improving the organization, delivery and distribution of medical care. It could improve the interdisciplinary operation of health care and conduct the necessary new educational programs in the process. It could improve the design and use of facilities. It could make an enormous contribution in seeking and effecting the employment of the full resources of modern technology in medicine.

The community laboratory could thus provide and coordinate within a unified program the full range of comprehensive health care. It could reach out to meet the needs of a whole population, making such

services available without economic impediments and encourage optimum use of and access to comprehensive health care. For not until medical care is organized to serve populations rather than patients will optimal delivery be attained.

Such a program could not only seek to provide services more economically, but also ascertain the health care needs of and utilization of services by a population. It could determine their accurate unit and aggregate costs. It could provide for basic research in patient care. It could evaluate by comparison with control groups both the short-range and the longitudinal results of comprehensive care in terms of health, productivity and cost. As a university undertaking, it could accumulate, evaluate and disseminate data and experience developed in a form adapted for use by others. It could attempt to develop experience that can be broadly applied and replicated.

The community laboratory needs to be carefully thought through, theoretically and practically. The present laboratories were long in evolving; the formation of new ones with many additional complications in the community will not be any easier. To establish them on a firm footing will take considerate and considerable development. The coordination of education, research and care, which in the long run may be its greatest strength, presents at the outset difficulties of formidable dimensions. But looking ahead, the pertinent question may be not whether closer ties between practice, education and research are desirable, but whether the doctor of the future will be able to do without them.

ANOTHER PATH TO GREATNESS

Lester Evans has inquired,²²

Society has had a taste of good medicine, but as it invests more of its money in it, will it be satisfied with the fragmented, and frequently inefficient, manner in which health and medical services are now delivered?

He asked further, "is medicine preparing itself for the services being demanded increasingly by the well person . . . ?"²³

The medical schools are preparing for leadership. Whether they can in fact influence the delivery of care to the extent contemplated by Congress, how far they should go in providing services, and the risks and advantages of such ventures in private-public cooperation are among the questions that are posed.

These paths are novel and will not please the doctrinaire of whatever persuasion. They are those of a society that is incorrigibly pluralistic and pragmatic; a source of its strengths as well as its shortcomings. They are experimental. They are mixed in their use of means and may, with some justification, even be regarded as mixed up. Those who think that the solutions have already been developed elsewhere and need merely to be accepted can only find these pathways irritating.

But the basic problems have not been solved. Medical care in the past has never been predicated on so strong a presence of change and presumption of further change. Society is no longer unresponsive; it is grappling with these problems. The public is not risking much in relying on medical schools even in endeavors that are new to them, such as the Heart, Cancer and Stroke program. It can resort later, if need be, to promulgated schemes. That is a new law and a new kind of program. Many opportunities will be found to evaluate and improve it. It is not known what the medical schools will do with the challenge laid down by this program, with the other similar challenges that can be anticipated, or with the community laboratories they are planning. But they are all worth the try. These paths, too, may lead the medical school to continued greatness.

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⁴ Health and Education: Messages from the President of the United States, March 1, 1966, 89th Congress, Second Session, House of Representatives Document No. 395.

⁵ Since this was written Congress passed another major piece of planning legislation, the Comprehensive Health Planning Act, Public Law 89-749.

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