“Health and Health Care: Personal and Public Issues”

By

Kerr L. White, M.D.
Professor of Health Care Organization
The Johns Hopkins University

The 1974
Michael M. Davis Lecture

CENTER FOR HEALTH ADMINISTRATION STUDIES
GRADUATE SCHOOL OF BUSINESS
UNIVERSITY OF CHICAGO
THE SPEAKER

Kerr L. White, M.D., has been Professor of Health Care Organization at the Johns Hopkins University since 1964. He was educated at McGill University and did postgraduate work at Yale University and the University of London. For a dozen years, he practiced and taught internal medicine and for twenty years has been concerned with the problems of organizing, managing, financing, and evaluating health care services both in the United States and abroad.

He is a trustee of Case Western Reserve University; a director of the Foundation for Child Development in New York; a director of HMO International, Inc., in Los Angeles; and a member of the Council of the Institute of Medicine, National Academy of Sciences, Washington, D.C., and of the Council of the International Epidemiological Association. He is a fellow of the European Institute for Health Services Research in Louvain, Belgium, the American College of Physicians, the American College of Preventive Medicine, and the American Public Health Association. He is a consultant to the Maryland Health Services Cost Review Commission, the U.S. National Center for Health Statistics, and the World Health Organization. He is the author of numerous publications in the field of health services.

THE SERIES

The lecture series was established in the name of Michael M. Davis, medical care pioneer, by his friends and admirers. Mr. Davis opened the series in 1963 with an address entitled "America Challenges Medicine." Each year a distinguished leader of medicine, the social sciences, hospital care, social welfare, labor, or management is invited to address persons interested in the improvement of medical services. The intention is to stimulate free and open discussion of the problems of providing medical care and to furnish a forum in which medical care programs may be proposed, elaborated, examined, and presented for public discussion and consideration.

THE OCCASION

Dr. White delivered this lecture at The University of Chicago on May 29, 1974.

THE late Michael M. Davis identified fundamental issues in American medicine and relentlessly pursued sensible solutions through scholarship and administration, in the best traditions of professional leadership and scientific statesmanship. Others for the most part have refined and developed his ideas, testing and implementing his solutions in diverse settings. The Michael M. Davis Lecture is a unique forum for fostering the twin ideals of critical analysis and vigorous advocacy that characterized this great man. It is a heart-warming privilege for me to be accorded the opportunity this year to add my contribution to a tradition that strives to emulate, but is unlikely to achieve, the vision of medicine and the nation's health that was so clearly articulated by Michael Davis.

My discussion of health and health care is organized around the three major themes of personal health care, organized health care, and community health care. Two sets of interacting problems enter into this discussion of personal and public issues: the universally shared concern for equality, quality, and costs, and the special roles and responsibilities of professionals, politicians, and the American public. Finally, I offer a few suggestions for the next steps that might be taken.

Personal Health Care

In medicine, as in many other aspects of contemporary life, the bureaucratization of knowl-
edge, on the one hand, and of action, on the other, has beclouded objective appreciation of the health care establishment’s tasks and capabilities. During the past decade, this country has experienced an avalanche of federal legislation dealing, for the most part, with circumscribed, categorical health problems, an endless series of reports by federal and private commissions and committees examining fragments of the health care system, and an unprecedented escalation in the costs of medical care. Annual expenditures are fast approaching $100 billion, or eight percent of the gross national product, and health care may soon be the second largest industry in the country.

It is my contention that this frenetic activity has not been matched by equivalent accomplishments. At best, we have not found the right solutions, and at worst, we have been trying to solve the wrong problems.

What exactly are the health care needs of society and how can they best be met? What exactly does society expect from its health care establishment and what is it prepared to pay for? These are the questions we must ask ourselves, for it is increasingly clear that the American public is not prepared to pay much more for what it is getting now and that changes are inevitable.

Sometimes I am convinced that the American public and medicine’s contemporary spokesmen have the same view of health and illness that they have of automobiles and household gadgets. Health and disease, it is believed, can eventually be understood in terms of physical and engineering models, and medicine, by the same logic, deals essentially with closed systems amenable to deterministic reasoning and convergent thinking.

Repairs, adjustments, and an occasional new part, together with regular maintenance, will insure a long and trouble-free existence.

As a result, center stage has been preempted by the modern acute-care hospital, staffed with specialists and subspecialists and supported by expensive equipment, admirably suited to diagnose and treat diseased organs and malfunctioning body systems, but nevertheless singularly ineffectual in coping with the problems of individuals and improving the health status of populations.

Yet there is nothing in human history, or for that matter in the teachings of philosophers and theologians, to give us hope that life will ever be without its problems or that curing diseases, as professionally defined, will be sufficient to remove the burden of distress and disability that affects us all at one time or another. Technologically based life styles and philosophies, hospital-centered medical care and financing schemes, and major breakthroughs in our understanding of fundamental biological processes have worked at cross-purposes to produce the present impasse. Because of naive public expectations and distorted professional priorities, what we have in effect is a fool-proof recipe for clinical and financial chaos. It is my view that the way out lies in reaffirmation of the fundamental tasks of medicine.

About 150 years ago the term “general practitioner” was first introduced in London where the Metropolitan Society of General Practitioners, self-anointed and self-appointed from the ranks of apothecaries, proclaimed that “we are a body of men who exist because the wants of society have raised us up.”

What are “the wants of society”? The answer to this question defines the tasks of medicine.
My own view is that the vast majority of transactions between individuals and health professionals are essentially problem-solving encounters that take place in an open system. Most patients initially present an amorphous array of problems, symptoms, and concerns. These have to be articulated, organized, and understood as the basis for a compassionate, scientific, and sensible course of action. Most illnesses, be they acute or chronic, major or minor, reflect open-ended problems of living and dying for which there are few specific cures or definitive answers. Treatment is largely supportive; it almost always involves choices and a measure of ambiguity and uncertainty. Each encounter is part of a continuum that draws upon past experience in order to look to the future. That future is more than the absence of disease: it is the ability of the individual to function as adequately as possible in an imperfect world, with as little pain and distress as can be managed for him and those around him.

As John Updike reminds us, problems that have solutions are not problems. It is the fundamental task, indeed, I would say, the only task, of the health care establishment, in contrast to human biology and psychology as sciences, to help society to understand the nature of these problems and individuals to cope with them.

There is now a substantial body of qualitative and quantitative experience to support the validity of this view of the task of medicine and there is more knowledge in prospect. I believe that this task of organizing the problems of patients and populations, of helping to contain, ameliorate, or resolve them, can only be accomplished by those whom “society has raised up” and called “doctors.”

In most industrialized societies, the general, personal, or family physicians are the ones who provide “primary” care, not in the sense of “first-contact” care, but in the sense of “fundamental” and continuing care. They are the foundation of the health care establishment; they provide a personal, curing, caring, and counseling service that employs science, technology, essential supporting systems, and other health care personnel, as the circumstances require. Primary physicians are at the cutting edge of the profession in recognizing, organizing, and defining health problems, in taking risks and assuming responsibility, in providing health education for individual patients and the public, and in applying new clinical knowledge; they and their colleagues are the underpinning of the entire health care system.

To think that the American public is going to “raise up” health associates, physician assistants, and nurse practitioners to supplant the primary or general physician is to misread medical history, clinical experience, and contemporary evidence. Let there be no misunderstanding; I am not denying that there is a place for this kind of professional assistance in supplementing the tasks of the physician. But I do not believe that the fundamental medical “wants of society” can be met by a combination of physician assistants and subspecialists, as we know them today in this country. Indeed, I would argue that the current expectations in many quarters that we can satisfy the basic need for primary care in this manner is an example of failure to identify the central problem in American medicine and a vain attempt to shore up the present unbalanced system of hospital-oriented, acute, specialist and subspecialist care. Someone must provide the
essential services of the primary physician; if we train physician assistants or nurse clinicians appropriately to do the job, then they will in due course be "raised up," or they will themselves "rise up," expect, and receive the status, support, and pecuniary rewards of those society calls "doctors."

The proper role for those whom society has "raised up" and has traditionally called "nurses," on the other hand, is as colleagues working in and from offices, clinics, and health centers staffed by primary physicians. Nurses can complement and support the work of physicians but not replace them. And in my judgment, the free-lance "public" health nurse or "school" health nurse trying to cope singlehandedly with patients' "private" problems is obsolete; nurses need to be part of an organization or system that provides "curing" and "caring" services in a responsible, cost-effective manner.

Organized Health Care

Exemplary personal health care provided by a primary, general, or family physician is probably no longer compatible with solo practice. The panoply of specialized knowledge and services available from contemporary community hospitals and medical centers must be readily available to support—but not to substitute for—the work of the primary physician. This requires closer links between primary, specialty, and subspecialty care and a reordering of priorities and resources. New patterns of organization must evolve that are more responsive to the perceived needs of people.

The prevalence of these needs among populations is increasingly known and predictable. It should come as no surprise that the rare disorders are rare and the common diseases are common. Headaches, bellyaches, and heartaches abound, but there are limits to the numbers of unusual metabolic defects, congenital abnormalities, severe accidents, or obscure immune reactions that exist in any population. The task of a health care organization is to deploy personnel and resources responsibly and responsively so that patients' problems, symptoms, and complaints are recognized at the earliest possible points in their natural history and appropriate—but not necessarily precipitous—action taken in a timely manner. The "passage of time" and the explanatory power of "waiting and watching" are still among the most potent diagnostic and therapeutic instruments available. They can be used securely and wisely when the patient has a continuing contractual relationship with an organized health care system and a personal relationship with a competent, caring primary physician. We have even forgotten that if you see one hospital bed you don't see them all. Infirmary-level beds are needed for primary physicians where patients may be cared for or observed for a few hours or a few days without being subjected to the hazards, terrors, and costs of the contemporary hospital bed in America.

It is said that the independent character and entrepreneurial drive of most physicians preclude their working for an organization or a system. My view is that while older physicians may find change difficult, younger physicians will not only expect to work for an organization but will welcome it. If physicians want to exercise their entrepreneurial talents, they can follow the example of great surgeons like Mayo, Crile, and Lahey and organize medical care. Instead of starting multi-specialty clinics, however, today's entre-
preneurial physicians must start health care systems that serve all the health care needs of substantial populations in a comprehensive fashion; in other words, the times require vertically rather than horizontally integrated organizations.

All levels of care, including primary care, consultant care, hospital subspecialty and inpatient care, nursing home care, domiciliary care, and their related services, need to be under the control of one organization. This requires at least firm contractual and fiscal arrangements, if not direct ownership, which put the physicians at clinical risk and the organization and its managers at financial risk. It is this approach to health care organization in contemporary America that, in my view, has the greatest chance of assuring the patient available and accessible services at any reasonable, or even unreasonable, hour of the day or night. If physicians or groups of physicians do not wish to undertake entrepreneurial initiatives, others can do so. The possibilities include governmental agencies, voluntary or private hospitals, medical societies, labor unions, consumer cooperatives, insurance carriers, and those with venture capital who believe that health care can and should be organized more sensibly than it is now in the United States.

Organization of health services to meet the needs of people brings with it an obligation on the part of the public to assume new commitments and responsibilities. Individuals and groups of individuals, either by virtue of employment benefits, place of residence, or legal entitlement, need to accept the desirability of establishing formal relationships with health care organizations or systems of their choice. The best known arrangement is contractual; the patient pays a fixed periodic premium or tax in return for responsible, comprehensive care. The organization has a defined constituency and a known budget, and the individual has access to a primary or general physician supported by a full range of organized personnel and services; it is a fair bargain.

The prepaid comprehensive health care plan combined with group practice is the unique contribution of American medicine to the organization of medical care. But so far this idea has not flourished. Apart from the apathy and opposition of many physicians, including members of the academic medical community and the American Medical Association, there appear to be at least three reasons. First, the resources and services have not been organized in accordance with peoples’ needs: there have been too few primary or general physicians involved, and all too frequently the source of initial care has not been based in the neighborhoods or communities where people live. Second, sources of capital financing, insurance coverage, physician remuneration, and patterns of medical education have all favored hospital-centered, if not hospital-based, practice to the disadvantage of other forms of organized care. Third, the market penetration, enrollment, or outreach efforts of many of these organizations has been less dynamic than the operational scale and epidemiologically determined balance of services warrants for their financial survival. In countries with a national health service such as Great Britain or Denmark, or even countries with a national health insurance scheme such as Sweden or Finland, the stark realities of bringing needs and resources into some kind of reasonable equilibrium are inescapable. The same realities confront health care systems that do not serve populations defined by
geography, but rather populations defined by enrollment. It is at the level of employment and the provision of needed and useful services that the problems of geographic and specialty distribution are most likely to be worked out, not at the supply or educational level, although universities too will eventually have to be responsive to the job markets for their graduates.

The current prospect in the United States of national health insurance and the enactment of the Health Maintenance Organization (HMO) Act of 1973 provide the health care establishment in this country with a unique opportunity. My own view is that we should encourage as rapidly as possible the formation of local, regional, and even national health care systems that provide a full range of rationally organized services. These systems should be regulated in the public interest so that they provide reasonable choices for the consumers and adequate markets for the providers, yield a fair return on the capital invested (whether from private savings or public taxes), and constitute sensible and equitable population mixes that reflect epidemiological and socioeconomic realities.

In the United States the airline industry provides a model for how organized health care services might evolve. By gradual aggregation, acquisitions, and mergers, we have developed a network of competitive, regulated, and sometimes subsidized airlines that are publicly accountable to the government for safety, standards of service, and availability, and privately accountable to shareholders, creditors, and entrepreneurs for return on investment. A judicious mix of creative public regulation and free-market forces within the context of national health insurance should provide the climate for the development of balanced, competitive health care systems. The public interest could, it seems to me, be served best by offering choices from a broad mix of systems, each striving to satisfy its customers and increase its market penetration. These could be under different forms of ownership and control with different incentives, particularly since we know little about the influence of these attributes on clinical performance, managerial accomplishments, or customer satisfaction. All should be fully accountable publicly with respect to the populations served, the services available, and the outcomes of the care provided.

In summary, what is needed is a restructuring of health resources so that systems and organizations emerge that are geared to the epidemiological and clinical realities of peoples' needs and that are cost-effective. Problems of ownership, control, initiative, and funding are of secondary importance to the problems of organization and management and to the related problems of setting objectives, assessing performance, and being accountable for resources used.

A critical ingredient in the restructuring of health care is the availability of managers competent to handle relatively large and complex health care organizations, for to be truly cost-effective, clinically self-sufficient, and capable of providing a full range of services, many of these enterprises may eventually require 200,000 or more enrollees and have gross revenues of $50 million or more annually. It is my view that neither the programs in hospital administration nor the schools of public health have really grappled with this problem. Schools of public administration and industrial management are
emerging as stronger influences in the health care field because of the demand for their graduates by many institutions, particularly HMO's. As these schools direct their interests to the preparation of managers for service industries, as well as for manufacturing industries, and for careers in the public sector as well as the private sector, the generic principles of management that have made them successful will become more available to the health care industry. If to their educational armamentarium are added courses in epidemiology, human biology, the history of medicine, health professions and health care institutions, and instruction about (but not in) clinical medicine, the graduates of these schools will supplant the traditional public health and hospital administrators.

The schools of public health and the programs in hospital administration, it seems to me, suffer from a certain confusion about objectives and poverty of purpose. Like the schools of medicine, they mistake means for ends and they are preoccupied with the preparation of traditional "administrators" rather than contemporary "managers." The task is not to preside over budgets and personnel but to manage resources to achieve objectives. They fail to realize that from the consumers' point of view, it is not institutional survival or diligent administration of categorical health programs that counts, or even the provision of so many bed days and services. Quite the contrary—the object of the exercise for the consumers is to stay out of institutions and to be less dependent on special programs and fragmented services in general. What is required on the part of a new breed of managers is a different and broader awareness of peoples' health problems in their entirety and greater flexibility and imagination in the organization of resources to meet those needs.

Just as the "wants of society raised up" physicians to meet individual health care needs, so society will "raise up" health care managers to organize systems for their collective needs. It has done this in banking, communications, education, inn-keeping and transportation, and other major service industries. Although none of these can be taken as a paragon of performance in the public interest, they all seem, on balance, to satisfy more of the customers more of the time than does the health care industry in the United States at the present time.

Community Health Care

If primary physicians are to help individuals cope with their personal health care problems within the context of well-managed health care organizations for enrolled populations, who is to see that entire communities or geopolitical jurisdictions have fair and balanced health services compatible with the resources they make available? Clearly somebody must have a public mandate to regulate and monitor personal health care and health care organizations and to apply suitable sanctions for infractions.

Over the past quarter-century we have experienced three abortive attempts to plan health services: the Hill-Burton program built acute-care hospitals to the point where the country is substantially over-bedded, the Regional Medical Programs expanded the notion that exemplary subspecialty or tertiary care is a substitute for exemplary primary care, and the Comprehensive Health Planning agencies tried to negotiate the future without information, fiscal control, or
political clout. These, too, are prescriptions for clinical and financial chaos.

My own view is that we are now ready to establish through federal legislation nonprofit, quasi-public, decentralized, autonomous, regional health services authorities or agencies. These agencies should have the power to regulate health care organizations, systems, and institutions within their jurisdictions by prospectively determining financial requirements, setting rates for charges, and, in concert with insurance commissioners, approving premiums. By balancing needs, services, use, quality, and costs, including the costs of private and public capital (so-called rate of return on investment), in the setting of rates and premiums, ample room can be left for the exercise of choice and the operation of free-market forces. Although the initial concerns of such an approach to public regulation must be with the costs and rates for hospitals and nursing homes, it seems reasonable to include at an early date HMO’s, foundations for medical care (FMC’s), individual practice associations (IPA’s), networks, and other health care systems.

The rights of both the enrollees of health care systems and the members of geographically defined populations require attention, but initially it seems unnecessary to regulate the mode or amount of compensation for physicians, nurses, or other health care personnel, even though monitoring of insurance claims, use, and quality is already upon us. The model is essentially that of public utility regulation as exercised through cost review mechanisms for determining financial requirements (including all the costs of capital) and for setting rates, rate-structures, and premiums rather than through the certificate-of-need approach. Licensing of professions and facilities

should be used to maintain and improve standards, not to control entry or restrict free-market influences. The certificate-of-need approach focuses primarily on facilities per se rather than on services and, like a nonprofit cartel, tends to restrict entry and reduce performance, incentives, competition, innovation, and the impact of cost-effective pressures on the demand for manpower and facilities. The health services authority model recognizes both certain strengths of our present health care arrangements that should be preserved, at least until it is clear that they are obsolete, and the need for new forms of public intervention and control at the level of use. It fosters reasonable choice and diversity for the country’s 210 million consumers, 270,000 clinical physicians, 140,000 offices and clinics, and almost 6,000 short-term hospitals, and puts societal pressure on everyone to establish and accept, with all deliberate speed, a sensible number of more formal local, regional, and national health care organizations.

*In establishing* the regional health services authorities or agencies, there are two major problems to be resolved at the federal level. The first relates to the size of the population encompassed by an authority’s jurisdiction. There are factors of topography, market areas, travel time, scale, and population density to be balanced. Most jurisdictions should cover at least 500,000 persons, so that they are large enough to encompass and justify most if not all the resources needed to provide a full range of services and, if possible, more than one health care system; the upper limit might be about 3 million persons. There are few guidelines except those from experience in other countries and from epidemiological knowl-
edge of the distributions of different disorders in general populations.

The problem of size is further complicated by the second problem of the relationship between the health services authority and state or local governments. The apparent inability of many traditional state and local health departments to effect change, the likelihood of federally mandated, if not funded, national health insurance, disparity among state resources, and the fact that many health care market or catchment areas are not coterminous with the state boundaries are strong arguments for federally constituted, autonomous health services authorities based primarily on recognized health care market areas, and secondarily on political jurisdictions such as cities, counties, or states. However, the former does not appear to be a politically viable option at present, and on balance I think it would be better, unless the local circumstances defy common sense, not to bypass existing political boundaries, especially state boundaries, but to concentrate instead on developing such cooperative arrangements among them as are already evolving in certain parts of the country. The prospect of federal revenue-sharing for some health services and the existing organization of essential social services along state lines are further reasons for following political boundaries to the extent feasible. It would be the task of the federal government to see that the regional health services authorities do their job, albeit in different ways, in order to maintain the eligibility of their constituents for receipt of federal funds.

If we have between 50 and 100 regional health services authorities responsible, not for providing themselves, but for seeing that their constituents receive acceptable health care through the mechanisms of cost, utilization and quality review, rate setting, and public disclosure of information, they will essentially become the agencies that anticipate problems, negotiate the future, and allocate resources—three synonyms for planning. Governed by elected or selected members of a board or commission and advised by councils of consumers, professionals, and the industry, these health services authorities would assume all of the responsibilities for overseeing personal health services that have been under the purview of traditional health departments, health services cost-review commissions, and other regulatory, licensing, certifying, and monitoring agencies, such as Comprehensive Health Planning Agencies, Regional Medical Programs, and Professionals Standards Review Organizations. The prospect for decentralized health services authorities of this kind is not remote; the idea is not new, prototypes exist, and support is substantial. Indeed, the prospect seems inevitable.

One of the keys to the work of these authorities will be the availability of timely information for decision making. This means that demographic, epidemiological, resource, clinical, and financial data must be capable of integration so that needs, resources, use, quality, and costs can be related to the achievement of defined objectives. Information systems that collect limited sets of uniform data once and aggregate them for release and use, with due regard for confidentiality, by different agencies at organizational, local, state, and federal levels are now technically feasible and increasingly acceptable. As in the case of the health services authorities, these information systems should be nonprofit, quasi-public institutions, not under the control or domination of any one public,
private, or voluntary group or agency; they probably need to be independent of the health services authorities themselves. Useful information to brief and educate the public, the professionals, and the politicians and to guide the health services authorities is essential for their success, or for the success of any other approach that attempts to relate resources, needs, and use sensibly.

One critical area of information must become available in order to solve this equation in a climate that attempts to meld the best features of the free market and public regulation, that is, information about the demographic structure and the burden of illness of users and nonusers of health care resources. Within this context, simple measures of symptoms, problems, disability, and distress obtained from the population by sample household surveys and from health care systems (including hospitals) are essential for defining needs, assessing quality, allocating resources, evaluating costs, and for determining financial requirements and setting rates.

This gets at the heart of the potential conflicts between community rating and experience rating of financial and clinical risks. A health services authority responsible for everyone within a geographically defined jurisdiction looks at it from the community viewpoint, while a competitive health services system, although conforming to external standards of performance and quality, is nevertheless subject to free-market pressures and must be cost-effective in meeting the needs of its own groups of consumers.

All too little fundamental and practical work is being done on the problems of measuring the health needs or status of the community at large and the case-mix of patients served by individual health care systems or hospitals; with a minimal set of well-chosen bits of data, it is a tractable problem that could go a long way towards harmonizing many apparently conflicting postures with respect to costs and benefits, value and money, needs and resources, and effectiveness and efficiency.

As in the case of primary physicians and health care managers, there is a paucity of suitably prepared professionals to staff health services authorities. Again, the traditional schools of medicine and public health and the programs in hospital administration have failed to anticipate the needs or to prepare adequate numbers of professionals. The skills required include knowledge of the health care professions and institutions, the economics of public utility regulation and public finance, clinical medicine, epidemiology, statistics, and health information systems. “Community physicians” with strong backgrounds in epidemiology, together with health economists and health statisticians, are probably the most important types of personnel needed. Just as the one-to-one primary physician is central to the identification and organization of the individual’s health problems, so the “community physician,” concerned with population medicine and supported by his colleagues in economics and statistics, is central to the staffing of health services authorities. I expect that this body of professional ombudsmen will also be “raised up” by society.

Whether physicians concerned with community health care should necessarily be “in charge” is less certain; suitably educated nonphysician managers may be equally or more effective. There may be no more reason to have physicians
running health care systems or agencies than to have engineers running railroads or pilots running airlines. These are all essential skills but not necessarily for the senior positions of an organization.

Equity, Quality, and Costs

Every health care system has to balance three contending factors. There is first the demand for equity or fair shares with respect to the availability and accessibility of health services; this is clearly an issue of great personal and public concern in the United States today, but not one that can be addressed without affecting the other two factors.

The second, the concern for the quality of care, is perhaps the most confused issue of the three. Through legislation establishing the physician-dominated Professional Standards Review Organizations, the United States has embarked on a pioneering effort to control the use of health services and to monitor the quality of care. The aspiration is noble but the technical problems are formidable, not the least of which are the definition of "quality" and the selection of an information base on which judgments are to be made. The current focus on individual patients cared for by individual physicians and the associated preoccupation with the processes of care seem misplaced in my view and unlikely to exert influence where it can do the most good. I believe the emphasis should be on simple measures of the outcome of patient care expressed as units (persons or days) of disability and distress or of restricted activity and aggregated for institutions, health care organizations, and populations. These are the same measures and values the primary physician uses in describing how sick his patients are and the health care manager or community physician should use in measuring the burden of illness for which his system or agency is responsible.

In addition, I think it is the quality of care provided by health care systems—at the present time these are for the most part hospitals and nursing homes—that should be the initial object of concern. Many failures in the maintenance of quality are systems failures, not physician failures. The way to get at the root of these failures is to start with boards of trustees and directors, hospital administrators, and health care managers and hold them accountable in relatively simple terms for the care provided by their institutions and systems, just as boards and managements of airlines are held accountable for many systems failures and even for aircraft crashes.

The emphasis that I urge on outcomes of care and performance of systems is difficult but not impossible with the current state of the art of evaluation and with the information potentially available to support this function. In all honesty, we cannot demonstrate to what extent the majority of treatments, procedures, and drugs, used singly or in combination in clinical medicine today, are efficacious in maintaining, restoring, or improving the ability of the patient to function adequately and free from pain and distress. To sift vast amounts of data on the treatment of individual patients and monitor all the clinical judgments made by individual physicians can only add further complications and expense to a confused and confusing problem.

Finally, there is the difficult issue of costs. Here too, a major stumbling block in the search for solutions is inadequate information and under-
standing of the problems involved. Complex service organizations like a hospital do not presently have standardized “input” or “output” measures and their productivity is hard to define and assess. As a start we need much better uniform methods of cost accounting. These methods must be sufficiently refined to relate the costs of standard units of service or patient care centers to the actual case-mix of patients served, including not only diagnoses and age but also some index of the intensity and severity of their problems. It will then be possible to determine whether a health care system or institution is being run efficiently or inefficiently and whether the additional “social” costs of providing excess capacity or standby services are justified and are being paid for from the right source. For example, a surgical ward whose patients are older and more seriously ill than the average would be expected to incur somewhat higher costs for treating them. And a small community will have a measurable and limited need for hospital beds and specialty services; with knowledge of the clinical and social costs of supporting these services, the community can begin to decide what it can best afford and how much it is willing to pay for certain conveniences like immediate access to specialty services. Eventually, and in some settings soon, it will be possible to relate the services supported to measures of their outcome, which in turn relate to individual and collective needs.

So far the problem of escalating costs has been largely viewed from the perspective of “control” or “containment” and little effort has been made to examine the underlying causes. The most recent trend toward rate setting by state health services cost-review commissions could be no more than an extension of this approach. However, there is the strong likelihood that it may develop into a much more powerful force for change. It is not possible to set equitable rates without uniform cost and clinical accounting, nor is it possible to make decisions on the grounds of efficiency alone. Inevitably determinations must be made about how much excess capacity the community can afford in its rate structure, about whether less expensive modes of care could achieve the same or better results, whether the quality of the services provided justifies their costs, and more generally, whether value is being received for money. Also rates must take into account not only present institutional or hospital capacity but also future financial requirements for capital and operating funds and therefore cannot be divorced from the planning process. When rate setting is applied to health care systems, such as foundations for medical care (FMC’s), HMO’s, networks, and individual practice associations (IPA’s), concern should be taken to stimulate their development and promote their viability so that a fair market test is achieved. I believe that the rate setting approach to regulation has great potential for restructuring the health care system more in accordance with individual and collective needs and resources and should be an integral part of future health services authorities. It seems to offer the most feasible combination of decentralized public regulatory and free-market forces currently available for trial in the United States.

Professionals, Politicians, and the Public

If the ideas and arguments I have discussed so far have merit—if they represent sensible and feasible progressions from our present arrangements to some more useful and acceptable structure—why are they not being implemented?
After all, most of these ideas have been around for a long time, and many have been or are being tried out in limited ways. I realize that nothing in the realm of public affairs, especially when it touches on private matters such as health, ever proceeds rationally, nor is it desirable to attempt to "plan" for some unattainable ideal state of affairs. It should, however, be possible to recognize change as the unchangeable imperative and to so arrange our health care resources and information systems that they respond flexibly and promptly to changing human needs and changing scientific knowledge and technology. To do this, it seems to me that professionals, politicians, and the public will all have to ask some different questions.

If the health care arrangements of a nation, state, or city are not meeting the needs of society, as the public perceives them, surely it is one of the major responsibilities of professionals, especially those in universities, to think through the problems clearly, clarify the issues, advance solutions, and initiate new educational programs and services. There are now enough quantitative and qualitative data on the health care needs of populations available so that reasonable people should be able to agree on the general outlines and dimensions of the task before us.

Universities and their medical centers cannot continue to operate in splendid isolation from their communities; they must themselves organize or join in cost-effective health care systems and be prepared to state what services they will provide and for whom they will provide them. These responsibilities will, of necessity, have to be scaled in accordance with the educational responsibilities that the university undertakes.

Universities will also have to make more deliberate and rational decisions, on the basis of national, regional, or local needs, about what kinds and proportions of the several basic types of health care professionals each is prepared to educate. In medicine, there is little doubt that the fundamental scientists have produced the great advances in biological and psychological knowledge and in high technology that make health care useful. This precious resource must be protected assiduously and promoted aggressively.

But medicine now needs to establish which of its many alleged "cures" are both efficacious and cost-effective and see that they are made promptly available to all who can benefit from them. A major responsibility of the primary physician is the "caring" function. Universities must reconsider the extent of their responsibilities for preparing physicians to care for the chronically ill, the disabled, the destitute, the dying, and the bereaved, lest society "raise up" some other body to meet its needs. Either collectively or individually, they must face this issue squarely because in a well-organized, epidemiologically based, cost-effective health care system, the demand for primary care physicians exceeds the current supply, whereas there are limits to the number of specialists and subspecialists that can be suitably employed. Subspecialists and specialists should limit many of their activities to those patients who are referred to them by primary physicians. To maintain their skills, to use their specialized knowledge appropriately, and to be cost-effective, subspecialists should not be expected to provide primary care. For the most part they are not suited, trained, or interested in providing this level of care any more than primary physicians are suited, trained, or interested in doing surgery or performing liver biopsies.
MANAGING and monitoring are the other two functions required for a balanced health care system. Here again, the universities will have to decide upon the extent of the demand and their individual and collective capacities to educate professionals to meet this demand.

The present needs for those trained to undertake the caring, managing, and monitoring functions appear almost insatiable. At the same time, more than half the undergraduates in many American universities want to enter the health care field. Surely in the face of this combination of needs and aspirations, it is within the power of the universities to redirect some of their educational efforts without compromising their contributions to fundamental science.

Changes for practicing professionals are also inevitable. As I have indicated earlier, it appears highly probable that most solo, fee-for-service entrepreneurs will eventually be replaced by salaried employees of private, public, voluntary, or investor-owned health care organizations governed by requirements for internal and external monitoring and accountability. There will be losses and gains in these shifts and change will not occur rapidly, but it is heartening to observe the increasing proportions of young physicians who do not find working for an organization or a health care system and receiving a guaranteed annual wage an unattractive or unrewarding life style. Resistance to the HMO and PSRO legislation on the part of some physicians and resistance to cost controls on the part of some institutions do not seem constructive or realistic. In the confrontations with politicians, and especially with the public, the professions cannot win in the long run, and I see relentless pressures applied to the universities, the professionals, and the institutions to organize health care in the United States into a coherent pattern. As members of the health care establishment, we should anticipate these pressures and create the future, not stand aside and be overtaken by events.

Among the many responsibilities that devolve upon politicians, the allocation of scarce resources is perhaps the most formidable. In the absence of a stable cadre of civil servants to formulate health care policy, on the one hand, and with a tradition of piecemeal, categorical approaches to health problems, on the other, it is little wonder that resource allocation decisions are based on individual sympathy for particular constituents or particular diseases rather than on what Walsh McDermott calls "statistical compassion." The United States still does not have a unified Bureau of Health Statistics. We urgently need such a unit in the Office of the Secretary of Health, Education, and Welfare to coordinate terms, definitions, classifications, and data from survey and program sources, such as those generated by the Social Security Administration (Medicare) and the Social and Rehabilitation Service (Medicaid) and shortly to be generated by HMO's and PSRO's and probably by a national health insurance program. Without a coherent national health information system, intelligent resource allocation is simply not possible. Although we are gradually moving toward an integrated federal-state-local health statistics system—and with it will come the capacity at each of these jurisdictional levels to balance equity, quality, and costs in more sensible fashion—the present National Center for Health Statistics, in spite of its excellent professional competence, lacks the necessary authority and administrative stature to move ahead vigorously.
Policy analysis is another underdeveloped area at all levels of government, and the creation of health services authorities and health care systems will increase the demand for analysts with both scholarly and quantitative capabilities to develop carefully prepared options for consideration by politicians and administrators. Here we need a number of centers or institutes for health policy analysis. Some of these could be in universities or nonprofit organizations and others could be free-standing; all could serve the several levels of government.

Finally, the public has unrealistic expectations of medicine and health care that are unlikely to be fulfilled. It is highly improbable that we will have efficacious forms of intervention that can repair all the ravages of time or reverse the impact of a lifetime of deprivation or destructive behavior. The primary physician can do much, with his nurse colleagues and other personnel, to counsel patients about diet, behavioral excesses, occupational stresses, and other maladaptive ways. Indeed such measures, sometimes called brief psychotherapy, have been shown to reduce utilization and to be cost-effective, apart from their therapeutic value in easing distress. A clinically concerned and cost-effective health care system also finds it important to educate its enrollees about the best ways to use its services in order to anticipate health problems, maximize the benefits of health care, and reduce costs, taxes, or premiums. In the role as a teacher of individual patients and populations, the primary physician comes closest to fulfilling the true meaning of the title “doctor.”

In the final analysis, the greatest benefits to individuals and society are likely to come from improved education in human biology and psychology at the elementary school level. A better understanding of how their bodies function and of the development and structure of personality and human relations are likely to do more to improve the health status of populations than any other single measure. Neither a public with unrealistic expectations nor a health care establishment with disorganized and unbalanced services has much chance of maximizing the application of useful scientific knowledge bearing on health and disease. Both the public and the profession will have to change.

Next Steps

Any analysis of health and health care in contemporary America, particularly when it strives to honor the memory of a practical man like Michael Davis, should conclude with suggestions for action. I have seven.

1. A National Commission on Health Services should be established and funded by a consortium of private foundations. Modelled after the Royal Commission on Health Services in Canada, this Commission should consist of a small body of distinguished citizens above the fray who hear arguments, review briefs, weigh the evidence, formulate the options, and suggest measures that would provide mechanisms for strengthening our health care establishment in the United States. The Commission should consider organizational, administrative, financial, and educational arrangements, incentives, and support mechanisms that will assist universities, health care institutions, and systems, professions, governments, and industry to improve our over-all health services. The Panel on Health Services Research and Devel
opment of the President's Science Advisory Committee, supported by the entire Committee, advanced this recommendation in 1972. Nothing has happened except for proliferation of additional categorical commissions and proposals for even more.

2. An Institute of Health Care Studies should be created by a consortium of organizations from the private sector. This Institute would conduct policy analysis, research, development, and evaluation directed at improving the management, productivity, effectiveness, and efficiency of the health care industry. The private and voluntary health insurance carriers and the pharmaceutical and hospital supply manufacturers should fund the Institute from their current cash flow just as other industries support analogous, independent research and development enterprises. The Committee for Economic Development, the Conference Board, and the United States Chamber of Commerce have recently published major reports on health care and should take the initiative in collective efforts to develop the best features of the free-market system for health care, while recognizing the inevitability of increasing governmental regulation as we pursue pluralism, diversity, and creative private-public partnerships.

3. The highest priority should be given to the generous support of educational programs for the preparation of primary physicians. This could include both undergraduate and graduate education or innovative combinations of the two, in any setting where suitable opportunities exist. Without a firm underpinning of fundamental or primary care, it is difficult to see how the present superstructure can be sustained for long.

4. High priority should be given to supporting the preparation of managers and monitors, whose education should include substantial experience in epidemiology and health statistics, as well as in economics, management science, accounting, fiscal and personnel management, public administration, and political science. Again, first-rate units, groups, centers, or departments prepared to educate health care managers, community physicians, epidemiologists, and health statisticians should be supported in any suitable university setting.

5. The Congress should establish a Bureau of Health Statistics and Evaluation in the Office of the Secretary of Health, Education, and Welfare, headed by a presidentially appointed commissioner with a seven-year term. It should integrate the health information and statistical systems within the Department and, in turn, coordinate them with other federal, state, and local systems. In this manner, information about users and nonusers of services, about the quality and costs of care could be compared over time and place. Information alone is not sufficient to ensure clear thinking about health and health care but it is certainly a necessary element in the process. Without adequate and timely information we must resort to anecdotes, impressions, opinions, and speculations—a poor way to run a $100 billion industry.

6. The Congress, either as a part of the Social Security provisions, the NIH appropriation, or the national health insurance legislation, should provide an additional 10 percent for
all research and development grants in medicine and health services that purport to be concerned with some new preventive, diagnostic, or therapeutic procedure. These funds should be used for the mandatory conduct of a randomized clinical trial or similar experimental or evaluative study to determine the efficacy or effectiveness of the new procedure. Without such trials and evaluations, we are likely to propagate further waste, permit harmful or useless procedures to co-opt scarce resources, increase the hazards to patients, and inflate the costs of care.

7. The Congress should establish regional health services authorities that have the power to conduct or coordinate the review of use and quality of services and their costs, including financial requirements and rate of return on investments, and to set rates and premiums for all health care systems and institutions within their jurisdiction. Initial guidelines and eventually standards for information collection, analysis, and assessment should be promulgated by a federal agency such as the proposed Bureau of Health Statistics and Evaluation.

Again, I emphasize that none of these ideas is new. Michael Davis touched on many of them in the course of his career. More than a decade ago in his inaugural lecture, his theme was "America Challenges Medicine"; I believe it is clear from my discussion that we have more to do before we meet this challenge.

SELECTED BIBLIOGRAPHY

Mark I: Earlier Ideas


Mark II: Later Ideas


