# Models for Organizing Health Services and Implications of Legislative Proposals

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MANY ORGANIZATIONAL BLUEPRINTS HAVE BEEN submitted as the basis for restructuring the United States health system, but only three basic models have a reasonable chance of being implemented: (1) the Professional Model, the name I have applied to the existing American health system, (2) the Central Planning Model, which is sometimes called the "political economy model," and (3) the Competitive Health Maintenance Organization (HMO) Model, which could also be called the "market economy model." Conceivably, any of these organizational arrangements (or even a combination of them) could form the basis of health care delivery in the future, since each has a cadre of active supporters, and since economic and social forces are at work portending change in the system as it now exists.

The structure and performance of the Professional Model are well known. The performance of the Central Planning Model is probably less familiar, however, even though it is the most prevalent pattern of organizing health care delivery among Western European nations and, until recently at least, has been preferred by most health planners. The HMO model is found exclusively in the United States, and has become much better known in recent months. Yet no one can say for certain what a truly competitive health market would be like, because in no instance do HMOs command a large enough segment of the health market to make their competitive influence felt.

In a general way, the effectiveness of these models can be compared simply by examining their working examples in this country and abroad. However, it is more difficult, if not impossible, to quantitatively assess and compare their effectiveness in optimizing the cost, quality and

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distribution of health care, because of the differing conditions in which they function and the varying populations they serve, and because models do not exist in pure form.

This paper represents a first attempt to set forth ideas in a systematic way that by themselves are not new. Its aim is to describe alternative models for organizing the delivery of health care and the assumptions on which they are based, and to lay bare the implications of specific legislative and administrative decisions and proposals, in terms of their relation to these models and to the larger issue of national health policy.

It will become clear that the paper is merely an unfleshed outline of related ideas. In part, this is by design, in deference to the purposes of the symposium and to the charge given each speaker to provide a stimulus and organizational framework for the deliberations. But the paper's sketchiness is also attributable to the fact that some of its ideas cannot be substantiated by objective research, even though the factual basis for much of what it says is either self-evident, or well known and widely accepted. These gaps in information illustrate the "flat-earth" state of the program and policy-making art in health delivery, and help to explain why the task of designing corrective measures to amend existing problems and deficits in health care delivery is both difficult and hazardous. Yet we have arrived at a critical juncture in health delivery, in which the opportunity has never been more favorable for revamping the nation's health industry—an industry that thus far has successfully resisted reform.

## Description of Organizational Models

I shall begin by describing briefly the major structural and behavioral characteristics of these three delivery systems, focusing mainly on their organizational and economic characteristics, and on the manner in which they regulate the performance of health providers.

### *The Professional Model*

The existing health system has been termed "the Professional Model" because its most salient feature is the influence and dominance physicians exercise over its structure, its practice patterns and the regulation of its performance.

*Organization.* The nation's health industry is often called a "cottage" industry. This is not meant to imply that the industry has spurned the development and use of sophisticated technology and scientific knowledge or that it relies solely on the uneven skills of individual craftsmen who learn their "trade" through trial-and-error. What is meant is that—unlike other industries that have undergone organizational, as well as technologic, revolution—the organizational structure of the health industry in essence retains its pre-Industrial Revolution format, relying to a large extent on small independent firms.

Health care delivery currently revolves around the central role of the individual physician and the doctor-patient relationship. The physician functions as the consumer's point-of-entry and guide in a complex system of small, and often highly specialized, provider units that are only loosely related.[1] At the outset, the consumer selects a physician of his choice, but thereafter most health care choices, including such critical decisions as those involving specialist/consultants, hospital admission, prescription drugs and so on, are made by the doctor, not the consumer. Moreover, the commitments physicians and patients make to one another have no particular time limit, and can be quite temporary, even though the relationship ordinarily continues through specific episodes of illness.

Health services are provided by a wide array of health practitioners and institutions, including physicians, hospitals, nursing homes, visiting nurses, health departments, laboratories and pharmacies. From the standpoint of medical treatment alone, nearly 200,000 small firms are providing care, consisting of primary and specialist physicians, who practice individually or in groups as private entrepreneurs.[2] For the most part, the nation's 280,000 practicing physicians function independently of one another, and rely on informal communication and referral practices. Although group practice has been growing, less than 20 per cent of the total supply of active doctors are affiliated with medical groups.[3]

Our 7,000 general and specialized hospitals are operated by both nonprofit and for-profit corporations, with a predominance of the former. From the economic and contractual standpoint, doctors and hospitals function independently, although most physicians maintain formal staff affiliations with one or more hospitals. Vertically integrated health systems, which combine hospital, physician and other professional health services in a single organization, are a small but groving segment of the present health system.

*Economic Characteristics.* The economic characteristics of the present health system reflect the size of its basic provider firms, and the dominance professionals exert over its organizational structure.[4] For example, separate financial transactions take place between consumer and providers following each major event in the health care process. Physicians receive fees for each service they render, such as operation or office visits, whereas hospitals are paid on a daily charge basis. Moreover, prices for medical services are determined by physicians themselves on the basis of "customary fees," and hospitals determine their charges according to cost-plus formulas. Competitive pricing is limited almost entirely to medical products suppliers and health insurance companies, and, even in these instances, competition is limited because of the consumer's lack of knowledge about products he buys.

In 1971, the nation's total expenditure for health care totaled $75 billion, or 7.4 per cent of the gross national product, up from $26 billion or 5.3 per cent of the gross national product, in 1960.[5] Medical care is paid for from a variety of sources, including consumer out-of-pocket expenditures (39 per cent), private health insurance (24 per cent) and government insurance and appropriations (35 per cent).[6]

Capital for facilities construction[7] and major equipment purchases comes from government grants, philanthropic gifts and from loans made by both government agencies and private lending institutions, which are usually repaid out of income derived from patient revenues. Medical research and health education are financed primarily from government appropriations and, to a much smaller extent, from philanthropy, student tuition and other sources.

*Control of Performance.* The health industry is a highly regulated one whose regulatory controls are dominated by practitioners and their professional societies and associations, and are focused on the activities of individual practitioners. The emphasis in assuring and assessing quality is on inputs, such as the licensure of individual practitioners, and—to a lesser degree—on performance review by professional peers. Consumers have very little knowledge of the quality of care provided by individual practitioners or institutions. Examples of professional dominance of regulatory controls include the following:

1. State laws grant physicians the "right to practice" medicine by licensure mechanisms, and grant more circumscribed licenses to

other health professionals and paraprofessionals, vesting control of the licensure process by statute with professionals themselves.[8]
2. Regulation of hospitals and other health institutions, through such mechanisms as facility licensure, accreditation and training program approval, similarly is vested in various professional organizations either by statute, common law or historic practice.[9]
3. Review of the quality of health care is conducted by means of peer and utilization review committees and mortality conferences—procedures that are controlled by physicians.
4. The distribution of health manpower, both by specialty and practice location, is determined largely by the availability of training and practice opportunities, and by individual preference.
5. Health planning agencies, whether voluntary or federally funded such as Regional Medical Programs (RMP) and Comprehensive Health Planning (CHP), created for the purpose of improving the quality and availability of care, tend to be dominated directly or indirectly by health providers.[10]

Increasing criticism is being directed at the performance of the existing health system, at the poor correlation between the qualifications of professionals and health outcomes, at the dominance professionals maintain over the mechanisms of control and at the maldistribution of resources resulting from random decisions by individual professionals seeking to maximize their own utility. Even the staunchest advocates of the Professional Model are beginning to recognize the weaknesses inherent in existing regulatory controls, and have proposed a number of remedial measures, such as the following:

Proposals aimed at controlling quality:

1. Peer review
2. National licensure
3. Continuing education requirements
4. Re-certification

Proposals aimed at controlling costs:

1. Phase II fee and price controls
2. Controlling the number of hospital beds
3. Prospective and all-inclusive hospital rates
4. Utilization review

Proposals aimed at controlling distribution:

1. Increasing the number of physicians
2. Increasing the number of allied health personnel, especially physician assistants
3. Creating a National Health Service Corps

Most of these proposals would move the existing system in the direction of central planning, but the mechanisms of control would continue to be exercised by professionals. Individual practitioners would determine the manner in which they manage patients and the way they use the institutional components of medical practice. The Bennett proposal, for example, which would create Professional Standards Review Organizations (PSRO), would focus quality control on approving or disapproving individual hospital admissions, with review organizations reacting to such things as prolonged stays by individual patients.[11] Even though it would be preferable to monitor quality by focusing on outcomes using statistical sampling techniques, the present structure of health delivery and its information system precludes this approach, and would force the review organizations to rely on input and process controls, focusing on means rather than ends.

## *The Central Planning Model*

The search for a more equitable and efficient way to deliver health care has again drawn attention to the nationalized health systems in Western European countries such as Britain and Sweden, and led to proposals that the United States health system be restructured along similar organizational lines.

The Central Planning Model is based on the fundamental notion of public control over the planning and allocation of health resources, and sometimes over the actual management of these resources in delivering health services. This basic approach is built into several delivery system proposals currently under discussion in the United States. For example, under the terms of the American Hospital Association's Ameriplan proposal, local health care corporations would report to state health commissions and bureaus of health financing, which in turn would report to a national health commission.[12] The resource allocation mechanisms,

included in several national health insurance plans, would follow a similar organizational pattern.[13] These various proposals differ somewhat in detail, but all are essentially variations of this basic organizational model.

In a more incipient form, this approach also can be discerned in the programs of comprehensive health planning agencies and, to a lesser extent, in some regional medical programs. In fact, some comprehensive health planning agencies already have been given statutory authority to plan and control the number and location of hospital beds and other major capital facilities.[14]

*Organization.* In a fully developed health system, based on the Central Planning Model, all medical care is provided through non-competitive regional health systems. Generally, a planning agency or health authority is responsible for coordinating all health resources—practitioners and facilities—within a defined region, and for ensuring the availability of comprehensive health care services to everyone residing in that region.

Regional health systems can vary in organizational style, but they often resemble the so-called planetary system developed in Sweden (Figure 1).[15]

In this arrangement, a network of facilities is deployed throughout a given geographic region on the basis of its population and estimates of the likely demand for health services. The focal point is a specialized medical center, which might include a medical school, to which is linked a network of ambulatory care facilities, community hospitals, long-term care facilities and less-specialized hospitals. The medical center not only integrates the system but also provides specialized and support services to practitioners and facilities in the regional network—services such as a standardized medical record system, centralized information storage and retrieval, laboratory services, day-by-day consultative "back-up" assistance, specialized tertiary care and so on.

Physicians commonly are incorporated into the regional system either as salaried employees or by means of formal contracts, although conceivably they could continue to practice on a fee-for-service basis, or some other economic arrangement. Regional systems could be run by private corporations as publicly franchised "utilities," or by a regional health authority as a publicly owned system, in a manner analogous to our public school systems. Private practitioners and HMOs might also be permitted to continue their practices in independence from the regional system, but would probably become marginal forms of care.

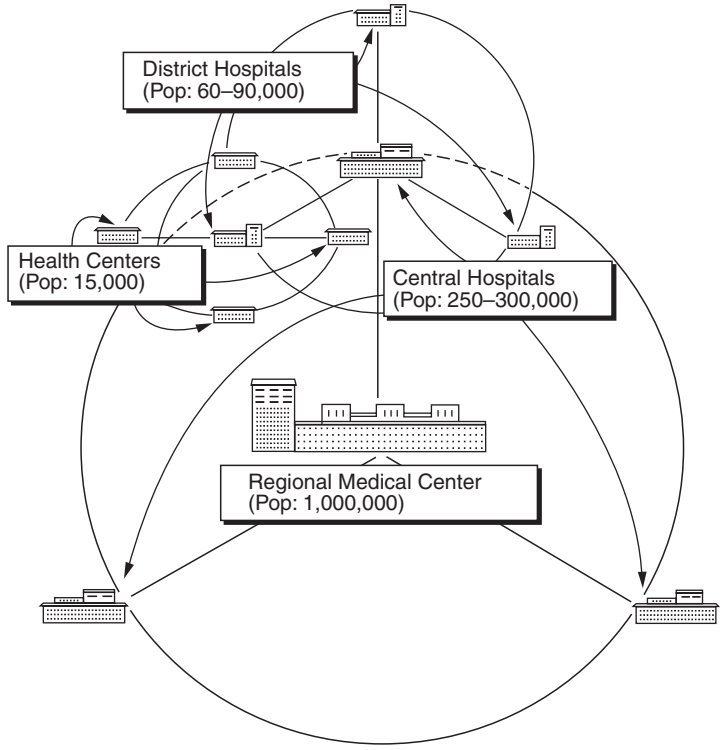


FIGURE 1. "Planetary" Model of a Swedish Regional Medical System

*Economic Characteristics.* The hallmark of the Central Planning Model is that health resources are allocated by a central governmental body rather than by providers or the forces of a competitive market, on the assumption that the political process is a more reliable and effective means for assuring equitable health care for every citizen.

In Britain, for example, the government establishes the nation's priorities, which, in turn, determine the magnitude and shape of the National Health Service.[16] Thus, in determining whether one form of social service should be given more or less emphasis, the government might decide to build more schools rather than more hospitals. It also decides whether resources allocated for health should be spent to build hospital beds, on the one hand, or ambulatory care facilities, on the other; whether geriatric services should be expanded, whether preference should be given to further investment in acute hospital beds and so on.

Theoretically, medical care could be financed from a mix of sources, including government insurance and appropriations, private insurance and consumer out-of-pocket expenditures. It does not necessarily require a system of universal national health insurance. However, the experience of other countries has shown that the source of funds can have a powerful shaping effect on the structure of health delivery. For example, in Sweden, revenues for physicians services are derived from national taxes whereas funds for hospital services are derived from local tax sources. This arrangement has led to wide disparities in the distribution of health care resources and has made the integration of health services more difficult.[17] It is reasonable to infer from the Swedish experience that a single source of funds would greatly enhance the leverage of the central planning authority over the health care delivery system.

*Control of Performance.* The primary objective of assuring equitable access to quality health services requires that the central planning agency have jurisdiction over both the allocation of scarce resources and the performance of providers. Accordingly, the Central Planning Model includes machinery for determining the master blueprint that will be followed in allocating the nation's health resources. Responsibility for resource planning and allocation within geographic regions is delegated to regional health authorities.

Physician manpower probably would be controlled by establishing national quota systems to assure optimum supplies of various medical specialists based on determinations of medical need and existing specialist supplies. Selected medical centers, with established reputations in particular specialty fields, would be given contracts to produce a stated number of specialists to meet national quotas. The right to practice a given specialty in a particular community would be subject to the authority of regional planning bodies. Decisions about the size and location of hospitals and ambulatory care centers, the kinds and location of specialized services and facilities and so on, also would be based on national criteria. The actual construction or acquisition of facilities, and major capital improvements would be subject to the authority of regional planning bodies.

Quality control could be based on input mechanisms and the judgment of individual professionals as it is at present, or the regional authorities themselves could assume direct management over the quality of care, and develop a more sophisticated, outcomes-oriented approach to assessing performance. It is also conceivable that the two functions

of resource allocation and quality control could be separated, along the lines of the regulatory arrangements that govern the commercial airlines in the United States.[18] In this instance, the Civil Aeronautics Board has jurisdiction over the cost and distribution of services, and the Federal Aviation Authority has responsibility for the quality of services.

## *The Competitive HMO Model*

As already indicated, a description of the Competitive HMO Model must be somewhat hypothetical, because—although prototype HMOs exist—a truly competitive health market does not, and the Model assumes that marketplace forces would alter the performance of *all* health providers.[19]

*Organization.* As the Competitive HMO Model implies, health care would be delivered by a variety of provider units, giving consumers the opportunity to choose from among competing HMOs and conventional providers in obtaining health care. Competition over prices and benefits would be encouraged, and monopolies would be discouraged. HMOs that succeed in attracting consumers would expand; those that are unsuccessful would fail. Solo practitioners, fee-for-service medical groups and voluntary hospitals could continue to function much as they do now, although it is expected that a greater emphasis would be placed on organizations delivering health services.

The Health Maintenance Organization is an organization that delivers comprehensive care, including preventive services, ambulatory and inpatient physician services, hospital services, laboratory and x-ray services and indemnity coverage for out-of-area emergency services, to voluntarily enrolled consumers on the basis of fixed-price contracts. By its contract, the HMO guarantees the availability of quality health care services to its enrollees.

In keeping with the market concept, HMOs can vary in organizational structure, and can be owned and operated by either nonprofit or proprietary corporations, including publicly held private corporations, consumer cooperatives, local units of government, medical societies, schools of medicine or other health providers.

If prototype HMOs already in operation are an indication of the future, the prevailing organizational model will be one in which hospital-based medical group practices serve as the nucleus for a linked network of ambulatory care branches whose spatial distribution is determined by the

demands of local markets. However, HMOs may also be organized more loosely, along the lines of the medical society foundations that have developed in California and Oregon, in which members of an entire medical society function together to deliver medical care on a risk-sharing basis, but continue to work out of their own offices, and to be reimbursed on a fee-for-service basis.[20]

Local HMOs are expected to serve enrolled populations of 20,000 or more, and to function either as autonomous units or as branches of larger national or regional organizations whose several subsidiaries might serve millions of persons.

*Economic Characteristics.* In the Competitive HMO Model consumers could purchase health care either on a fee-for-service basis from conventional providers, or by a single financial transaction, through fixed-price contracts with HMOs. Capitation prepayment changes the financial incentives for providers and places the obligation on them to control costs. HMOs are responsible for the care of defined populations; thus they can array and allocate their resources in the most cost-effective manner possible. For example, the experience of existing HMOs suggests that capitation payments covering both physician and hospital services lead to a substitution of ambulatory care for inpatient care.[21]

Prices and benefits would be strongly influenced by the competitive market because consumers would base their purchase decisions on information about the comparative costs, range of benefits and amenities offered by competing providers. Unlike the fee-for-service system, HMOs and their subscribers would measure the organization's success in terms of its ability to optimize subscriber health at reasonable cost, rather than in terms of the number and type of services the organization provides.[22]

It is assumed that capitation payments to HMOs will cover the costs of providing services, including the cost of constructing health facilities. The costs of specialized training and, perhaps, health services research might also be covered. Federal funds might be needed to correct existing inequities in the distribution of health resources and for such matters as the development of performance reporting systems for health delivery units, which would further specific national objectives.

*Control of Performance.* Paying HMOs in advance on a capitation basis for a specified set of services provides them with a powerful inducement to render cost-effective health care, but it also creates an incentive to provide too few services of too low quality and to engage in the practice

of "creaming," by limiting enrollments to persons judged to be favorable health risks.

Thus, the quality control problem in HMOs is a unique one. Some have assumed that the HMO strategy should logically include the creation of a new system of regulation to guard against underservice, on the one hand, and to take advantage of the opportunity offered by these organized health care systems to shift to a more rational basis for monitoring and assessing the outcomes of health care, on the other. The establishment of a health outcomes commission has been proposed for this reason.[23]

Thus, HMOs that contract with the federal government would be expected to meet minimum organizational and performance standards and would be subject to the authority of an external regulatory agency, independent of health providers. They would be required to have an open enrollment policy, although like other health insurers they would be permitted to engage in experience rating. HMOs would submit reports of their performance to the regulatory agency, which would have the power to impose an array of sanctions for poor performance, ranging from simple warnings to public disclosure of substandard performance, reductions in reimbursement payments and outright decertification for participation in federal programs.

## Assumptions Underlying the Models

Each of these organizational models is based on a set of underlying assumptions about how, and by whom, the delivery system should be organized, how providers should behave, what the consumer's role should be and the manner in which the health system should be regulated or controlled.

### *The Professional Model*

The existing health system is a highly elaborate and generally competent one that is dominated by physicians and other health professionals. The justification for this professional dominance rests on a set of assumptions that includes the following:

1. A major assumption is based on the notion of "professionalism" and professional autonomy, and asserts that inasmuch as physicians are the sole possessors of a body of highly technical knowledge, they alone are capable of organizing and governing

the delivery of health services and should be permitted to do so without lay interference ("doctor knows best!").

Several corollaries follow from this basic premise:

- Only physicians can determine who is qualified to practice medicine and, therefore, they should have exclusive control over the licensure process.
- Physicians can recognize the specialty fields where they can be most effective, and should be free to select the field of their choice. (The right to select practice locations is less strongly held, but the right to select patients is stoutly maintained.)
- The quality of medical care can only be judged by professional peers who are privy to the body of technical knowledge upon which medical science and practice rest.
- Only physicians can recognize the value of their services and, therefore, ethically only they can price, and profit from, the services they render.
- Lay interference will result in inferior medical care.
- A "technologic imperative" obligates medical science and its practitioners to develop and use whatever sophisticated techniques they can devise to prolong life, regardless of cost or the number of persons who will benefit therefrom.

2. The consumer alone knows when he needs medical care and should be free to select the physician of his choice, but ensuing decisions about diagnosis and treatment must be made by his physician.

   The assumption is that consumers are capable of choosing a primary physician, and that they are responsible for the state of their health, for following the physician's advice and so forth.

3. If physicians, hospitals and other health providers are paid for providing health care services they will be motivated to provide the services patients need.

   A closely related corollary asserts that the demand for medical care, and the fees charged for rendering medical services, are directly related to medical needs.

4. The Professional Model is the only organizational form of health delivery that can attract persons of the high caliber needed to assure continued high quality health care services.

   To a large extent, the physician "brain drain" that is taking place is the result of political and lay interference.

5. Many problems related to the quality and distribution of health services would correct themselves if the supply of physicians were increased.

## *The Central Planning Model*

In the Central Planning Model, authority over planning, allocating and sometimes managing the resources of health delivery is vested in a public agency. The rationale for public control over the delivery of health services is based on the following assumptions:

1. Physicians and other health providers, when permitted "to do their own professional thing," cannot be relied on to select appropriate specialty fields, to distribute themselves equitably or to organize themselves in a manner that fulfills public needs and expectations.
2. Consumers lack the knowledge to make informed choices about health care, and even if they were given the necessary information their choices would have little effect on the performance or structure of a delivery system that is a professional monopoly.

   The inability of consumers to make rational choices, coupled with the excessive self-interest of providers, has led to the present health care crisis.
3. Reliance on marketplace forces has demonstrated the wastefulness of competition, and such alleged market improvements as legalizing advertising would only serve to further distort the health care market.

   The supply of health care providers will never be sufficient for true competition to take place.
4. Western European health systems are working well and show the way for needed improvements in our own health system.
5. It is feasible for public planning bodies to design improved health care delivery systems and to successfully implement basic changes in the structure of the existing one.

The important corollaries of this premise are as follows:

– It is more feasible to redistribute public funds than to redistribute private funds.

- A public body is capable of placing an effective ceiling on public expenditures for health care and other social programs, and to rationally order public priorities among competing social programs.
- A public body is capable of making rational and equitable resource allocations within the health system itself.
- Continuing improvements can be stimulated in the health delivery system despite public control.

At times these assumptions are expressed in somewhat different terms by backers of the various modified versions of the Central Planning Model. This is especially true with respect to their points of view on such optional questions as the desirability of regional health systems versus a single national health system, and on the question of who should control the process of planning and allocation.

Thus, on the question of regional systems versus a national system:

- Some assume that the only way to optimize allocation of health resources is by delegating responsibility for planning and managing health care delivery, within defined geographic areas, to regional planning authorities, that are familiar with the region's unique needs and resources.
- Others contend that national planning and allocation is the only way to ensure equitable distribution and uniform quality, and that regionalization would tend to perpetuate existing inequities and dilute public control.

On the question of who should control the planning and allocating process; some believe that consumer control is feasible, and that it is the only basis on which the satisfaction of public needs can be assured; others believe that central planning and allocation of health resources is a highly technical process, and that it can result in a better health delivery system only if planning is directed by elite professionals.

## *The Competitive HMO Model*

The Competitive HMO Model relies on the dynamic forces of a competitive marketplace to motivate health providers themselves to restructure the delivery of health care in a more rational and responsive manner. This position is based on the following assumptions:

1. Significant cost, quality and distributional advantages are to be gained by increasing the size of health delivery units, and by vertically integrating the various components required to provide comprehensive health services.

   The separation of capital and labor is both illogical and uneconomical, and the lack of integration leads to fragmented health care, uneven quality and inflationary costs.
2. Competing HMOs will be more responsive to the needs and expectations of consumers because they serve defined populations that voluntarily enroll through fixed-priced capitation contracts.

   HMOs will place greater emphasis on prevention and ambulatory care, and assure their enrollees of guaranteed access to health services.
3. Consumers (individually and/or groups) with sufficient knowledge about medical care and about available providers will make rational choices in obtaining health care and be able to periodically evaluate the care they are receiving.

   Consumers electing to enroll in HMOs will make their choice of providers well in advance of their need for health services, basing their choices on information supplied to them about prices and benefits, as well as amenities. Moreover, it will be easier for the consumer to grasp information about a small number of organizational providers than about a large number of individual practitioners.
4. Because the basis on which HMOs are reimbursed may motivate them to provide too few services, and because the market cannot be relied on in the area of health quality, the performance of HMOs should be monitored by an independent external regulatory agency using regulatory processes based on outcomes, rather than existing regulatory controls.
5. Existing HMOs are more than marginal forms of health care that will succeed in the future, as they have in the past, to rationalize the distribution of resources, and to provide cost-effective health care services.
6. The distribution of HMOs can be effectively influenced through inclusion of financial incentives plus national health insurance with an HMO option and, failing this, territorial franchising in which HMOs are required to serve "less desirable" populations in return for the opportunity to operate in "desirable" areas.

## Strategies Influencing the Structure and Organization of the Health System

Let me turn now to a discussion of the policies, strategies and contemporary events that are influencing, or could influence, the organizational structure of the health delivery system. At present, random decisions are being made, based largely on expedience and on accommodations to particular cases and circumstances, that have significant implications for the organization of the health industry in the future. The failure to understand these implications has sometimes led to decisions that tend to move the health system in conflicting directions.

### *The Professional Model*

The defeat of any proposal that weakens the control of health professionals obviously would tend to preserve the characteristics of the present system. However, this section will focus on specific actions that would reinforce professional control and thus preserve the Professional Model. For example:

1. If existing professional controls are retained and strengthened in any new programs aimed at regulating the cost and quality of health care, the continuance of the existing delivery system would be assured.

   That possibility exists in the current Congressional concern over controlling the price of medical care and holding down excessive hospitalization. One approach that has been proposed to accomplish this objective is the Professional Standards Review Organization (PSRO).[11] Aside from the question of its efficacy in achieving Congressional intent, the PSRO approach explicitly approves the idea of professional control over the utilization of health services, and its adoption would tend to perpetuate the existing system.

   In a similar way, the regulatory role of the Joint Commission on Accreditation of Hospitals (JCAH) was officially sanctioned and reinforced by the Medicare Law, which prescribed JCAH accreditation as the basis for certifying hospitals for participation in the Medicare program.

2. Preserving provider involvement and control over the planning and allocation of critical health resources minimizes the likelihood that planners will make significant structural and organizational changes in the existing health system.

   As the federal government's role in financing health resources has expanded, its dependence on the advice and cooperation of physicians and health professionals has grown apace. Government's need for the information they possess, and for their support in program implementation, has given health professionals strong representation on countless national and local advisory groups. They constitute a powerful voice in key planning decisions, involving the establishment of training programs for health personnel, authorizing the construction, expansion and renovation of hospitals and other health facilities and allocating training and practice opportunities for health professionals. Continued professional involvement in these groups greatly reduces the possibility that major structural or organizational changes will be made in the existing system. This phenomenon of the "professionalization of the bureaucracy" has been observed in the centrally planned health systems in many Western European countries.[24]

   Sometimes providers have succeeded in retaining control in spite of explicit intentions to establish public control. For example, although it is counter to the intent of the Comprehensive Health Planning Act, preliminary evidence suggests that professional providers have often gained effective control over local CHP agencies in such critical decisions as those involving the allocation of hospital beds.[10]

3. Giving preference to fee-for-service payment over other reimbursement methods will favor the continuation of the Professional Model.

   Inasmuch as the organizational structure and practice patterns of providers are strongly influenced by the manner in which they are reimbursed, the future of the Professional Model is closely tied to the continuance of fee-for-service reimbursement. Adoption or widespread use of another form of reimbursement would tend to weaken existing organizational arrangements. Preferential actions that might be taken that would reinforce the fee-for-service approach include:

– A decision by the Price Commission (Phase II) to permit a higher rate of increase for fee-for-service providers than other forms of payment, such as prepaid capitation premiums charged by HMOs.
– The imposition of more stringent entry conditions on health delivery organizations that employ systems of payment other than fee-for-service, as some members of Congress are advocating in drafting the HMO Assistance Act now under consideration.
– Removing existing financial disincentives to providing high-cost services (e.g., such costly and "high style" procedures as cardiac surgery and cobalt radiation), which would occur if a catastrophic health insurance plan were enacted.[25]

## *The Central Planning Model*

In enumerating forces that would favor the establishment of a Central Planning Model, it should be understood that we are not necessarily talking about a fully developed regionalized health system. Because the model's salient characteristic is its reliance on centralized planning and allocation of resources, the critical question is the degree to which a given action, decision or strategy would promote such concentration of authority, and empower public agencies with such controls. Examples of actions that would tend to move in this direction are as follows:

1. Creating strong regional health planning and management agencies, vested with decision-making powers and the necessary sanctions to enforce their decisions, would tend to minimize professional influence over public authorities. (It should be pointed out, however, that some argue in favor of a "technocracy" approach to central planning, in which the professional elite makes the judgments regarding resource allocation, in a manner similar to the system of study commissions used by the National Institutes of Health.)

   Creation of such authorities, with power to allocate key health resources (especially hospital beds, physicians and federal health expenditures), and the responsibility to ensure the provision of health care services to residents of specified areas, would lead to the development of regionalized health systems. If such agencies were given the further power to levy taxes to finance the costs

of health care under a regional taxation system their positions, of course, would be further strengthened. Contrariwise, if health care were financed solely from federal taxes it is less likely that regional differences would be permitted.

The current health crisis is being used to justify the creation of such regional controls, but whether they conform to the Central Planning Model or to the Professional Model would be determined by who controls the mechanisms of planning.

2. The powers of regional health authorities would be further enhanced if they assumed direct ownership and operation of the vital components in their regions, such as hospitals, ambulatory care centers, computerized medical information retrieval systems and educational programs.
3. Payment for all health services from a single public program would tend to be coupled with public controls and the centralization of the resource planning and allocation function.

In addition to the actions just discussed, the first two strategies discussed under the Competitive HMO Model below, would be equally applicable to the Central Planning Model. The use of public and private persuasion to legitimize change and to gain the acceptance of both providers and consumers for new forms of delivery, and the investment of public funds to stimulate the formation of organized health systems, would be essential to establish and promote either of these organizational forms.

## *The Competitive HMO Model*

Implementation of the Competitive HMO Model would require a twofold approach: removal of existing legal barriers hindering the establishment of new organizational forms of health care delivery, and adoption of certain positive programs to aid in the development of HMOs and to further a competitive health market. Examples of actions of this kind include the following:

1. The use of public and private persuasion to legitimize both provider and public acceptance of new forms of health delivery.

Those capable of creating HMOs are more likely to do so if the onerous stigma can be removed that traditionally marks

those who seek change in the health system. The success of the HMO strategy, in large part, is the result of the endorsements of President Nixon and HEW Secretaries Robert Finch and Elliot Richardson, as well as of such leaders of the Democratic party as Senator Edward M. Kennedy and Congressmen Paul Rogers and William R. Roy. Backing by leaders such as these and other influential persons undoubtedly has helped to stimulate the formation of HMOs, and the rapid enrollment in HMOs, that is going on today.

However, the possibility that public leaders will be willing to endorse change, and that consumers and providers will be willing to accept it, also depends on the nature of the proposed change. The probability of its acceptance and endorsement is greatly enhanced if the proposal is generally in line with social and cultural traditions and if it embodies a flexibility that permits variety and freedom of choice for both the provider and the consumer. The HMO idea is viable because it does not insist that providers and consumers adhere to a single rigid organizational structure, but instead allows structural variety. In addition it is built on economic principles that match the entrepreneurial and free enterprise spirit traditional in the United States.

2. Stimulating the formation of organized systems of health care (HMOs) by providing public funds for start-up loans and grants, and by providing technical assistance to HMO developers.

   Public funds invested in the development of costly supporting services essential to organized health care systems, such as automated unit record systems and outcome-oriented quality control systems, would also promote such change.

3. Eliminating existing legal and quasilegal barriers that prevent the establishment of HMOs, or unduly restrict their structure or performance.

   The following actions are illustrative:

   – Elimination of state legal barriers to new health care delivery organizational forms.
   – Exempting HMOs from restrictive professional licensure requirements if they meet organizational quality standards.

4. Giving preference in publicly financed medical care programs to reimbursement by capitation prepayment covering both hospital

and physician services to encourage low cost, high volume ambulatory and preventive services, and to discourage overutilization of high-cost inpatient hospital care.

5. Using the Antitrust Act to enjoin individual providers or their professional associations or both from obstructing, or preventing, the establishment of competing health care delivery organizations (HMOs).

## Concluding Opinions and Speculations

I would like to close by expressing some opinions and speculations about the direction in which the United States health system seems to be moving, and why. In doing so, I will draw on the ideas just discussed, and on some rather vivid recent experiences, acquired while working with the political apparatus and representatives of the current health care delivery system. These opinions and speculations will be expressed by describing the possible interaction of forces that seem to be shaping the delivery system, by pointing out the major issues raised by Congress and the Administration as the HMO proposal has made its way through the maze of political debate, and by sketching out the gloomy scenario of an almost totally regulated, but structurally unchanged, American health industry.

It seems to me that two major forces are at work shaping the structure of the delivery system. I have attempted to portray them in Figure 2, although like most diagrams of real processes, the figure can only suggest their complexity and dynamic interaction. On the one hand, there is a movement toward vertical integration of the components of health delivery. This trend is toward the formation of larger organizations, with their own doctors and other health workers, their own hospitals and whatever resources may be necessary to meet virtually all of the health care needs of the defined populations they serve. On the other hand, there is a simultaneous counter movement toward public allocation of health resources, portrayed on the horizontal axis of the diagram. This trend is away from competition, consumer choice and reliance on market mechanisms for allocating resources, and toward regionalization and enrollment based on geographic residence.

Any reasonable organizational model for the United States health system falls at some point between these two axes. For example, Point 1 plots

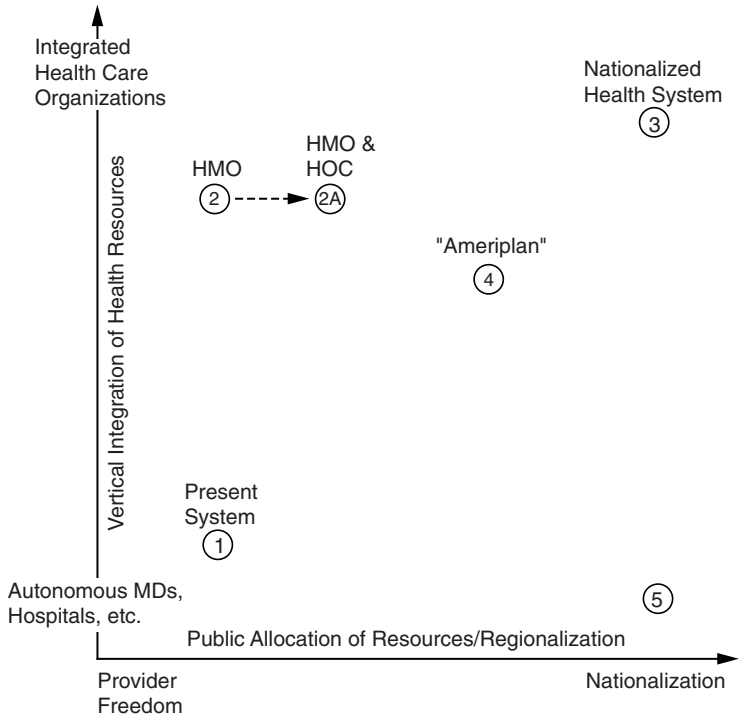


FIGURE 2. Major Forces Shaping the Structure of the Health Delivery System

the approximate location of the existing delivery system. It suggests that vertical integration is relatively minor at present inasmuch as vertically integrated health care organizations account for a very small proportion of personal health care services. The location also suggests that public allocation of health resources is comparatively minor. Instances in which provider organizations are responsible for defined populations (i.e., defined in terms of residence, socioeconomic or medical status and so on), are limited to such agencies as public hospital systems, neighborhood health centers, veterans' hospitals and community mental health centers.

Point 2 plots the approximate location of the health system envisioned by the HMO idea. Most medical care would be provided by vertically integrated organizations, including both HMOs and large fee-for-service groups, which compete with each other, and with a diminishing number of solo practice physicians. Consumers would select the organization or provider of their choice on a voluntary enrollment basis.

Point 2A illustrates the direction in which an HMO-based health system would move if public regulation of health quality were introduced. It assumes that consumers cannot make qualitative judgments without being provided with information about health providers. It further assumes that an outcomes-oriented quality assurance system is feasible in regulating vertically integrated health care organizations, serving large enrolled populations. Thus, adoption of this approach would have the effect of moving the vertically integrated HMO system further to the right on the public regulation axis.

Point 3 plots the location of a hypothetical nationalized health system, in which health care is delivered solely by vertically integrated health care organizations. These organizations could be either publicly or privately operated, but delivery of services would be under the total supervision of a public agency. That agency would: (1) allocate territories to organizations that would be responsible for the health care of all territorial residents, (2) exercise public control over prices and the quality of services, and (3) presumably exercise some degree of control over the availability of health resources. Consumers would have no choice of providers unless a vestigial private practice sector were available, but would obtain their health services from the regional organization.

Point 4 represents the approximate location of a quasipublic system, such as the American Hospital Association's "Ameriplan."[12] This concept calls for the creation of public authorities that would establish health care corporations, set rates and allocate territories on a franchise basis, although consumers would have some latitude in selecting a provider. Vertical integration would be deliberately fostered, but would not be as pervasive as in either the HMO model or a nationalized health system. Public control would be much greater than in the HMO model (even with a health outcomes quality regulation system), but somewhat less complete than under a wholly nationalized system.

A financing dynamic also can be added to this diagram. To move along the vertical axis, all consumers must have basic health insurance coverage including both inpatient and outpatient care as a minimum. This is particularly true if capitation payments are used to effect structural integration. Based on the experience of existing HMOs, the content of benefit packages appears to determine the degree of integration. It can also be assumed that resources for the provision of services, which cannot be provided on a cost effective basis, are not likely to be integrated. To move the delivery system along the horizontal axis, each individual must

not only have extensive health insurance, but health insurance must be publicly financed. Some attempts already have been made to use existing public financial programs to leverage the entire delivery system, but this strategy risks driving providers out of the public system to escape public intervention.

Up to this point research and public discussion have focused largely on the vertical axis of the diagram. The advantages and disadvantages of integrating health care firms, the effectiveness of prepayment as an incentive and other related subjects have been extensively explored. But this is not the case with respect to the horizontal axis, where a number of issues about regionalization need further exploration. Such questions as the following are troubling, at least to me:

1. Regionalization implies public allocation of health resources, but will this lead to an undesirable politicization of the planning and allocation process?
2. Regionalization has two sets of advocates who promote the idea for opposite reasons. Consumer advocates back regionalization as the only way to end professional dominance, to impose order on the health system, to ensure equitable access and to integrate health programs with environmental and social programs. They contend that professional control can be effectively displaced only by countering professional power with political and economic power vested in consumer-controlled community planning bodies. Other backers of regionalization, while agreeing with most of these assumptions about the rationality of central planning, contend that professionals must retain control, and that the success of the regionalization model depends on placing planning control in the hands of a group of wise men, backed by a superb information system, who alone can formulate the criteria on which a rational delivery system can be built. Thus, the question is, who should control the public planning and allocation process, consumers or a professional elite? Is there any evidence that favors one form of control over the other?
3. Public planning bodies tend to be vulnerable to capture by the industries over which they have jurisdiction, partly because they need the expertise and cooperation of those industries to successfully carry out their missions. But this inherent hazard raises serious questions. How can we avoid the possibility that major

deficiencies in the present health system will be perpetuated and compounded? Will planning authorities retard innovation in the health industry by their reluctance to try new methods? How can existing providers be prevented from using the planning agency to solidify their positions and to exclude competition by new firms?

4. Federally planned programs, financed by federal taxes, tend to allow little latitude for local control. For example, in most large-scale social service programs, there is talk about regionalization, but a clear trend toward federal standards and regulations. In view of this experience is it realistic to expect regional control over a federally financed health system? On the other hand, if health care is financed by local tax funds, as in the case of the public schools, how can equitable access be assured?

These issues suggest that regionalization may inhibit innovation in health care delivery and, thus, further study and analysis are needed. On the other hand, it would be useful to identify those health services that are not likely to develop adequately unless they are brought under the control of regionalized planning bodies. For example, such vital resources as emergency services, undergraduate medical education and health services research seem to fall into that category.

A number of issues have surfaced during the course of the political debate in Congressional hearings over the HMO proposal that provide a unique and incisive insight into the difficulty of changing established systems. Although the issues raised by Congress and the Administration are leveled at the HMO proposal, in a larger sense they are the same concerns that will be expressed about any proposal for change.

One issue concerns the degree of preference that should be given to new organizational forms of health delivery. Both Congress and the Administration seem reluctant to promote change by taking such preferential actions as: (1) allocating more dollars to HMOs than are allocated to conventional providers, and (2) exempting HMOs from the jurisdiction of regulatory mechanisms that govern the existing system, even though their applicability to organized delivery systems is inappropriate or questionable. If delivery system reform is needed, as both Congress and the Administration avow, how can constructive change be fostered if those who are prepared to create new forms of delivery are not encouraged to do so?

A second issue is the familiar charge that any new form of health delivery, especially if new forms of ownership or new organizational arrangements are involved, is bound to lower the quality of care. Even though the performance of existing HMOs indicates that quality is as high, or higher, than in the conventional system, some fear that HMOs may skimp on the care they provide because they are paid on a capitation prepayment basis. This persistent fear was a compelling reason for proposing that HMO quality be regulated in a new way (i.e. by monitoring outcomes), and that an independent regulatory agency be created to do the job.

A third issue, closely related to the second, focuses on the internal structure of HMOs, and is expressed by a preoccupation with detailed organizational requirements. Thus, repeated attempts have been made to require that HMOs meet certain statutory requirements. These concern ownership, group practice, the number and types of health workers they employ, the nature of the organizational relation between the HMO medical group and its hospital, the manner by which its physicians are paid, the degree to which the HMO can reinsure for services it does not directly provide, the nature and degree of consumer involvement in HMO planning and management and the number of enrollees it must have. The criteria on which these proposed structural requirements are based invariably are taken from existing ratios and prevailing practice patterns, and their adoption would have the effect of perpetuating many of the organizational inefficiencies the HMO proposal is designed to amend. It is difficult to see how the delivery system can be changed as long as this proclivity for the status quo continues.

Another issue is the question of how HMOs should be paid and on what basis their services should be priced. Congress has shown considerable reluctance to move from the cost reimbursement principle to fixed price reimbursement. Perhaps it is merely displaying the long-standing preoccupation with public accountability that obsesses most bureaucrats and legislative bodies—the kind of fiscal myopia that "knows the price of everything, but the value of nothing." Backers of national health insurance plans should closely examine the debate over the proposed HMO benefit under Medicare, since this issue is by no means peculiar to HMOs.

A final concern focuses on the relation between the financing issue and the delivery system reorganization issue and the question of which should come first. It is the distributional aspect of this dilemma that is especially

troublesome. The question is, can any new structural arrangement be expected to meet the needs of underserved populations if those who are underserved lack the necessary purchasing power to pay for health services?

Despite the fact that the present session of Congress will probably take favorable action on virtually everything we have sought with respect to HMOs, except adequate health insurance coverage for everyone, I feel that the likelihood of change in the health system is relatively low.

Instead, the problems of the present system are leading to a set of essentially negative, but nonetheless powerful, allocation or regulatory devices. These devices already are being captured by existing provider interests, and undoubtedly will be used to maintain the system in its present form and to keep out competing systems. For example, comprehensive health planning agencies tend to be dominated by providers, and although they were created for the purpose of improving distribution, some have tried to use their authority to thwart HMOs from acquiring needed beds. As mentioned earlier, the proposed PSROs would establish controls over the utilization of hospital beds, but would vest that control with physicians. Congress has created a "Health Services Corps" to alleviate the shortage of physicians in underserved areas, involving the federal government in the direct provision of health services, carefully structured to give medical societies jurisdiction over the operation of the program.[26]

The ultimate direction of these and other actions is toward an almost totally regulated, but structurally unchanged, health system, suggested by the location of Point 5 on the diagram in Figure 2. It is a gloomy prospect since the possibility of innovation and change would be virtually nil.

Fortunately, the opportunity to avert such a fate still exists. One hopeful factor is that a virtual consensus has developed around two important issues: that the components of health delivery should be vertically integrated by encouraging the formation of larger health care organizations; and that some way must be found to give every consumer the purchasing power to obtain basic health care services. It seems to me that the big issues now are whether we will use the opportunity of national health insurance to stimulate such organizational change in the health system; and whether we will choose to regulate the providers of health care on the basis of their performance rather than by existing "input" devices.

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7. Hospital construction expenditures alone amounted to 3.5 billion in Fiscal 1971, *National Health Insurance Reports, op. cit.*, p. 2.
8. Licensing boards in most states consist of from three to twenty members. Typically the board is composed of representatives of the regulated profession who are selected by each governor upon recommendation of the appropriate professional society. About half of the licensure laws require all members of the board to be licensed practitioners. However, in some allied health occupations the boards include no representatives from the regulated occupations, such as dental hygienist licensing boards, which in all states consist only of dentists. (From *State Licensing of Health Occupations*, Public Health Service Publication No. 1758, Washington, United States Government Printing Office, 1967.)
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10. Under current law, CHP agencies are required to have a majority of consumers. The difficulty is that the slender majority possessed by consumers is often eroded through lack of attendance by consumer representatives or their lack of understanding of many issues under discussion. Thus, as a practical matter, many CHP agencies are effectively dominated by providers who are both "committee wise" and generally more knowledgeable about the issues.
11. Senator Bennett's proposal would amend H.R. 1 (Ninety-second Congress, First Session, 1971).
12. Ameriplan—A Proposal for the Delivery and Financing of Health Services in the United States, Report of a Special Committee on the

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13. The Health Security Act (S. 3) would promote formation of comprehensive health service organizations, and specify referral patterns, conditions for certain procedures and prescriptions, altering existing relations between provider units, and establishing formal linkages between hospitals, nursing homes and physicians.
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20. A number of health organizations which now fall under the rubric of HMO have been in existence for some time. The two largest HMOs are the Kaiser Foundation Health Plan, which operates in five states and has more than two million enrollees, and the Health Insurance Plan (HIP) of Greater New York, serving about 800,000 persons. Other well-known HMOs, which have been operated for a number of years, are the consumer-controlled Group Health Cooperative of Puget Sound, the UAW-sponsored Community Health Association of Detroit and the proprietary, physician-owned Ross-Loos Plan in California. A newer HMO variant is the medical care foundation, whose two best-known examples are the San Joaquin Foundation in California and the Physicians Association of Clackemas County in Oregon. Several unique HMOs are in various stages of development: the Columbia-East Baltimore HMO, jointly sponsored by the Johns Hopkins School of Medicine and the Connecticut General Life Insurance Company; the medical school based HMOs at Harvard, Yale and Georgetown; the hospital-sponsored HMOs such as the one affiliated with St. Mary's Hospital in Milwaukee; rural HMOs such as the Marshfield Clinic in Marshfield, Wisconsin; and HMOs organized from neighborhood health centers, such as the

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23. This proposal is included in two bills currently under consideration in Congress, S. 3327 and H.R. 11728.
24. *See* Klein, *op. cit.*, p. 119.
25. For example, *see* Feldstein, M.S., A New Approach to National Health Insurance, *The Public Interest* pp. 93–105, Spring, 1971. Also two catastrophic health insurance bills are now before Congress: S. 1376, introduced by Senator Long, and H.R. 177, introduced by Representative Hall.
26. The Emergency Health Personnel Act of 1970 permits physicians to enter the Public Health Service and voluntarily serve in rural areas for a two-year period in lieu of military service.