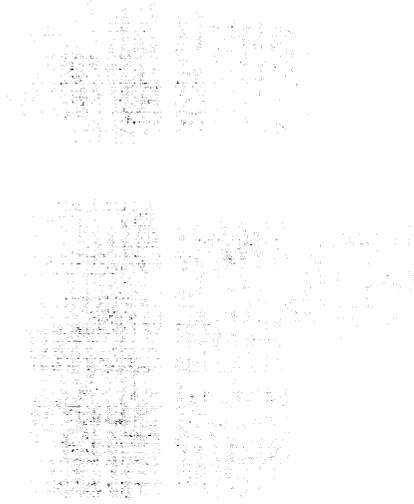


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Increased Competition: Proposals arid Concepts

“Would you tell me, please, which way I thought to walk from here?” “That depends a good deal on where you want to go,” said the Cat.

*-Lewis Carroll
Alice in Wonderland*



Contents

	<i>Page</i>
Current Incentives Related to the Use of Medical Technology	17
Proposals To Increase Competition	19
Greater Patient Cost Sharing	20
Competition Among Comprehensive Care Organizations	22
Mechanisms To Promote Cost Consciousness	23
The Concept of Competition	24
The Market for Medical Care	26
Effects of Increased Competition: Areas To Be Emphasized	27

List of Tables

<i>Table No.</i>	<i>Page</i>
1. Participants and Choices To Be Made Under Increased Competition	19
2. Comparison of Proposals To Increase Competition	23

List of Figures

<i>Figure No.</i>	<i>Page</i>
1. Decision Points Under Proposals for Greater Patient Cost Sharing or Greater Competition Among Comprehensive Health Care Organizations	20

Increased Competition; Proposals and Concepts

In recent decades, spending for health care has been rising much faster than spending for other goods and services in the economy. In 1965, national health expenditures of \$42 billion accounted for 6 percent of the gross national product (GNP), but by 1980, they totaled \$247 billion or 9 percent of GNP. This growth has been especially notable in the Federal budget, largely because of the entitlement programs for medical care that began in the mid-1960's. In 1965, when Medicare and Medicaid were enacted, personal health care expenditures in the Federal budget were less than \$8 billion; in 1980, they amounted to about \$63 billion, of which \$36 billion was for Medicare and \$14 billion for Medicaid (103). Not only are these expenditures straining the Government's budget, but they are also crowding out spending for other programs, such as public health, nutrition, education, and housing.

Strategies to promote competition in health care are responses to the rapid and continuing growth of expenditures for medical care, as well as to the inappropriate use and rising cost of medical technologies. Proponents of greater competition agree in their diagnosis of the problem—lack of cost

consciousness by consumers and providers in their decisions about medical care. They also agree that the incentives of present financing arrangements are the underlying cause.

This chapter describes how current medical insurance arrangements stimulate people's use of medical technology without full regard for the cost implications. The next section describes two major strategies intended to promote price competition by increasing cost consciousness. One strategy is to increase patient cost sharing when technologies are used; the other is to use consumer selection among plans as the leverage to pressure comprehensive medical care organizations to deliver medical care more efficiently. A review of the economic theory of competition distinguishes the theoretical model from the strategies proposed. The chapter concludes by examining the competitiveness of the medical care market and the importance of the three areas on which this report will focus as it analyzes the implications of increased competition—use and innovation of medical technology, quality of care, and consumer information.

CURRENT INCENTIVES RELATED TO THE USE OF MEDICAL TECHNOLOGY

There is widespread agreement that present financial incentives have fueled the use and cost of medical technology (79,88,235). The nature of insurance coverage and the financial and organizational arrangements that have flowed from it have dulled the sensitivity of physicians, consumers, and hospitals to cost considerations. The purpose of health insurance is to allow people to obtain needed care without risking financial ruin. But the use of medical technology is subject to much discretion, and insurance has reduced cost as one of the few factors that deter use.

There is also widespread agreement that taxation policy has stimulated the growth of medical insurance (79,88,104). Employers' contributions for their workers' medical insurance and other fringe benefits are deductible as business expenses and are not reportable as personal income to the workers. An extra dollar taken in medical insurance premiums is therefore worth more to a worker than an extra dollar of income that is subject to income tax. Because of these taxation policies, people do not bear the full costs of the insurance coverage they select or that is selected on

their behalf by labor unions and employers. This situation encourages people to have more medical insurance than they would buy with after-tax dollars. The deduction from personal income for a portion of health insurance premiums has an effect in the same direction, but is weaker because of the limited amounts permitted.

In 1980, patients paid directly for 32 percent of the total expenditures for their personal health care (103). But the percentage varied greatly with the setting and type of technology. Insurance coverage was most pervasive for hospital expenditures, of which public and private third parties paid more than 90 percent. Third-party payment for other services has been more limited: 63 percent of physician expenditures, 58 percent of nursing home care, 41 percent of other health professionals' services, 25 percent of dental services, 17 percent of drugs, and 15 percent of eyeglasses and appliances (103).

Although coverage for catastrophic expenses grew during the 1970's, at least 15 percent of people with private insurance did not have catastrophic protection (49). Catastrophic coverage limits the insured's direct expenses for covered services to a maximum annual amount, which may vary from \$1,000 to \$10,000 depending on the policy. In 1978, an estimated 9 percent of all families, mostly those with low incomes, had out-of-pocket medical expenses that exceeded 15 percent of their income (49). The most frequent catastrophic expense has been for long-term care, a type of care used mostly by elderly women (48). The risk of an elderly person's having a catastrophically expensive illness (defined as \$5,000 in 1974) was eight times greater than that of a younger person, but an elderly person had the same low likelihood (0.04 percent) of paying out-of-pocket \$5,000 or more. Besides private coverage, public insurance programs such as Medicaid and State-supported facilities have expanded to provide financial protection (58).

Insurance not only protects people from the risk of large unforeseen expenditures, but also affects their decisions about using services. Because people with insurance face a lower or even zero price at the time of use, insurance coverage weakens the role of cost as a deterrent to people's decisions

to seek care and as an incentive to choose less costly providers or technologies. If greater use by some people causes insurance premiums to rise, they do not feel the full effect, because the cost is distributed beyond the users to all the insured.

Insurance coverage also affects the decisions of physicians, hospitals, and other medical providers. When deciding about the use of medical technologies, providers are less concerned about the effect on their patients' finances if patients are insured. With the deterrent effect of cost muted, the factors that *promote* technology use weigh more heavily in providers' decisions. Medical training emphasizes reliance on sophisticated technologies, and professional norms convey greater prestige to physicians who use such technologies. The society as a whole values technological solutions to problems, in medical care as well as in other fields, and patients often associate sophisticated technologies with quality care (13).

The usual methods of paying providers also contain incentives for them to use additional and more expensive technologies. As is the case with the providers of most services, the providers of medical care gain more revenue the more their services are used. The difference is that consumers with insurance tend not to resist the cost. Most physicians are paid fees for their services, with the relative fees higher for procedures connected with complex diagnostic equipment than for those associated with caring. Hospitals are reimbursed for the costs or charges of their operations. They may compete for physicians by making sophisticated, prestigious technologies available to them, and passing the cost on to third-party payers.

The overall result has been inefficiency (higher cost for a given level of quality) in the provision of particular technologies and in the combination of technologies used for a given medical condition. In the absence of pressures for providers to be efficient, fragmentation in the delivery of care has persisted, with resulting duplication of facilities and technology use. A related phenomenon is the choice of setting for providing certain technologies. Often the more expensive and less safe hospital setting is used when ambulatory care would be just as effective.

Cavitation payment alters the incentives of fee-for-service. A practice paid by cavitation receives in advance an annual per capita payment for each enrollee and undertakes the responsibility of providing or arranging for covered services. To increase the practice's revenue, therefore, it is necessary to increase the number of enrollees. Providers do not have a financial incentive to use additional or expensive technologies because revenue per enrollee remains fixed regardless of the number of services used. Since use raises expenses but not revenue, the financial incentive is to limit use.

Health maintenance organizations (HMOS) receive payment by cavitation and combine the functions of insuring and providing a comprehensive range of medical care. HMOS have two main variations: prepaid group practices and individual practice associations (IPAs). A prepaid group consists of physicians, most of whom practice full time with the group; an administration; and sup-

porting ancillary facilities. Since most of its revenue is fixed in advance, a prepaid group must make decisions about the acquisition and use of technologies within a predetermined budget. Within this budget, physicians and administrators weigh alternatives and choose technologies to buy and use.

Although the umbrella organization of an IPA is paid by cavitation, the same incentives do not apply to technology use. In contrast to a prepaid group, physicians in an IPA remain practicing in separate offices and receive fees for the separate services provided to IPA enrollees. Most also have additional and often larger numbers of patients who pay on the usual fee-for-service basis. Thus, these IPA providers do not face the same preset and limited budgets of their prepaid group counterparts. And the incentives of cavitation payment to limit technology use are correspondingly weaker.

PROPOSALS TO INCREASE COMPETITION

Proposals to increase competition share the intention of strengthening the extent to which cost enters into the decisions of providers and consumers. Procompetitive proponents concur in a desire that consumer preferences guide the style of medical care that is delivered. They also favor relying more heavily on the marketplace for decisions, with governmental regulation assuming a corrective and supportive role. All advocate that Government continue its support of elderly and poor people and, depending on the proposal, that Government qualify plans and enroll members.

Although the strategy that would increase patient cost sharing and the one that would promote competition among comprehensive care organizations overlap in many of their means and goals, they have a decided difference in emphasis (see table 1, fig. 1). The former favors increasing the direct financial impact on individuals at the point of using medical services. The latter places the critical consumer choice at the time when insurance coverage or plan is selected and would have individual consumers bear more of the cost of that decision. Under this strategy, the organization delivering care would have financial incentives to control technology use.

Table 1.—Participants and Choices To Be Made Under Increased Competition

Government

- Determine tax treatment of insurance premiums by employers, employees
- Determine tax treatment of medical expenditures by consumers
- Whether to guarantee loans to consumers for high expenses
- Whether to subsidize premiums or expenses of aged, poor, general population
- Whether to mandate or support areawide planning
- Determine its role in quality assurance
- Whether to provide information
- Determine its role in consumer enrollment and qualification of insurance plans

Consumers

- Selection of coverage or supplementary coverage
- Decision to seek care
- Type of provider to use
- Type of technology to receive

Unions or employers representing consumers

- Develop and screen options available for consumers

Insurers

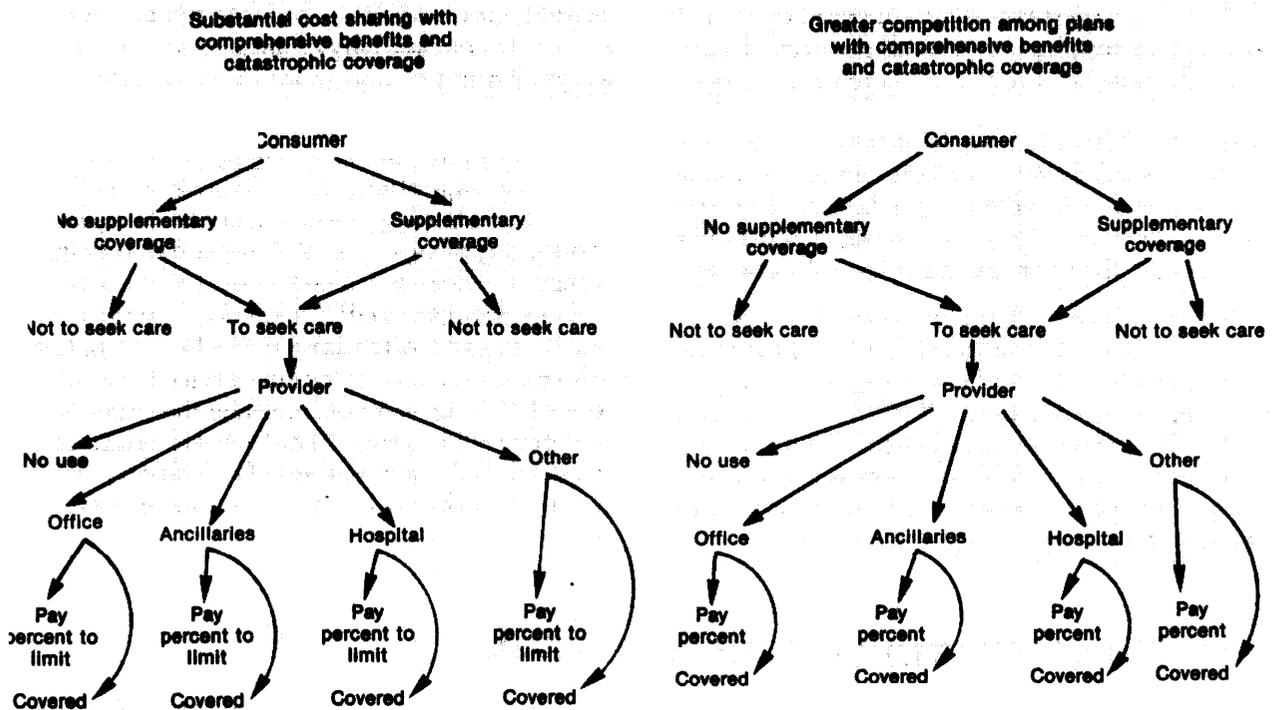
- Types of coverage to offer
- Marketing strategies
- Relationships with providers

Providers

- Decision to provide care
- Types of services and settings (technologies) to use
- Relationship with insurers
- Relationship with other providers

SOURCE: Office of Technology Assessment.

Figure 1.—Decision Points Under Proposals for Greater Patient Cost Sharing or Greater Competition Among Comprehensive Health Care Organizations



SOURCE: Office of Technology Assessment.

Greater Patient Cost Sharing

The proponents of increasing cost sharing when patients use services wish to correct the distortion that now results from insurance coverage (88,213). They characterize the present situation as one in which, "with the exception of some of the poor and the near poor, most people have too much insurance of the wrong kind" (212). Insurance is considered excessive in the sense that the costs are greater than the benefits to the consumer. Although the consumer benefits from reduced risk of facing uncertain medical expenses, the resulting costs of insurance coverage from stimulating use of services and altering the style of care delivered are said to overshadow these benefits.

People make decisions about use that are based on the lower cost they pay out-of-pocket. Since insured people do not bear the actual costs of use, the theory is that they are more apt to initiate

medical care and that they weigh cost less heavily in their choice of providers and technologies. The overall results are not considered desirable even from the point of view of the insureds, who may prefer that more resources be channeled into areas other than medical care.

Proponents of greater patient cost sharing would correct this distortion by having the non-poor pay a substantial portion of their medical expenditures. Feldstein, for example, has proposed "major risk insurance" (88). Insurance would cover comprehensive care, so that coverage would not artificially encourage one setting or type of care. Insurance would also completely cover catastrophic expenses to protect people from financial hardship. Nonpoor families would bear their medical costs up to the catastrophic threshold, a figure such as 10 percent of income that would be "large in comparison to average family spending and

health care but low relative to family income” (88).

Feldstein’s proposal called for the Federal Government to provide such major risk insurance and to guarantee loans for expenses below the limit. A tax credit for catastrophic coverage (213) or for expenses above a designated percentage of income (242) are alternatives. Such provisions would replace the current income tax deduction for medical expenses over 3 percent of income. Feldstein favored continuation of Medicare, perhaps with increased deductibles. Major risk insurance would eliminate medical indigency by limiting the deductible to 10 percent of income. Families below the poverty line could be given an additional cash grant to cover their expected medical expenses.

Feldstein foresaw a continuing role for areawide planning. Although the market would guide more decisions, planning could coordinate the location of expensive equipment and long-term investment in facilities.

Proponents of increased cost sharing by patients at the time of use contend that this strategy would lead to more efficient use of resources. As patients became more cost conscious about whether or not to use services and shopped on the basis of cost and quality for the provider or the setting of the care that they did seek, providers’ behavior would change. Physicians would continue to guide patients, but their advice would reflect concern about the effect on their patients’ finances. And hospital administrators would become more conscious of costs in the management of their institutions (88).

How likely are these intended effects to occur? Proponents of greater cost sharing agree on the importance of reducing first-dollar coverage, which they believe stimulates people to use more services. An important issue is whether or not people with insurance coverage against major risks would purchase supplementary coverage for expenses below the limit that are left uncovered. Feldstein believes that people seek insurance mainly to protect against the risk of major expenses, and expects that most people would not seek additional coverage if major risk insurance existed. He predicted that only families expecting above-average medical expenses would seek supplement-

tary coverage, a process of self-selection that would raise premiums and ultimately limit demand for such coverage.

Supplementary coverage induces greater use of the services covered by the basic plan. A person with insurance to supplement Medicare coverage, for example, is more likely to use additional services and to reach the level at which Medicare coverage begins. Since the premium for supplementary insurance does not reflect extra costs to Medicare, Pauly has suggested a tax on supplementary coverage. Such a tax would discourage people from purchasing supplementary coverage or reflect the added cost if the purchase was made (213,215).

There has been no direct test of the kind of insurance coverage that people would select if they had catastrophic coverage and taxation did not distort their choice. Some theoretical work supports the prediction that people would not elect supplementary coverage for ambulatory care if they had inpatient coverage (136). Even with present tax incentives, where employees had options, almost as many chose the least expensive option as chose the most expensive (84). People at greater risk of having medical expenses, such as elderly people and those with recurrent expenses for chronic conditions, and people who generally wish to avoid risks would be more likely to buy supplementary coverage. Although the extent of supplementary coverage and the magnitude of the changes are unclear, the direction of the effect of more neutral taxation would be toward coverage with more cost sharing than is now the case.

Proponents of greater cost sharing believe that the changes they propose have the best chance of moderating medical care use and costs in the near future. However, a major goal of this strategy is to improve the decisionmaking process. It would be perfectly acceptable to them if people still wanted to buy that amount and kind of care when they were paying a larger part of the actual cost at the time of making the decision. “A fundamental premise of competition is that the level of use of a good or service that people demand at a price that reflects cost is the best level of use for them” (215).

Competition Among Comprehensive Care Organizations

A second strategy emphasizes competition among organizations that deliver comprehensive care (79,170). Proponents of this approach observe that organizations such as prepaid group practices provide medical care to their members at lower cost than other practices. But these organizations represent a small share of the market. Despite their growth in the recent years, in 1981 prepaid groups had fewer than 9 million members, which represented slightly under 4 percent of the market nationally (57,61). This strategy seeks to create market conditions so that these and other organizations that deliver comprehensive care can compete on a more equal basis with other plans for members.

Certain aspects of the present market are cited as inhibiting the growth of these comprehensive care organizations: the tax treatment of insurance premiums reduces the influence of cost in consumers' selection of plans and coverage; and prevailing payment methods do not reward cost consciousness, but instead give physicians and hospitals higher revenue for greater and more costly use of technologies. To create a more favorable climate for the growth of comprehensive delivery systems, two main mechanisms are suggested: expanding the number of people who are offered an alternative delivery system and, through tax changes, having people bear more of the costs or savings of their coverage choices. With all plans offering comprehensive care and catastrophic coverage, consumers would choose the combination of style of care, level of premium, and extent of out-of-pocket costs that they preferred.

This strategy would place the critical choice by consumers at the point of insurance coverage rather than use of services. This approach reflects the judgment that, "the sick or worried patient is in a poor position to make an economic analysis of treatment alternatives" (79), and that the appropriate point for rational economic choice is annual selection of a health plan.

Proponents of competition among plans argue that comprehensive care organizations are now

providing good quality care at lower cost. If all plans compete for enrollees on an equal basis, they expect that consumers would prefer these comprehensive care organizations. They expect that competition for enrollees would both favor these organizations and pressure other providers to improve their efficiency. Some of the arrangements formed by providers would resemble those now most common—fee-for-service physicians practicing separately from hospitals and other facilities and receiving reimbursement from an insurer.

What is emphasized, however, is the superior performance that has been or might be achieved by comprehensive care organizations, mainly prepaid group practices, but also IPAs, fee-for-service multispecialty groups, primary care networks, health care alliances, and preferred provider organizations (see Glossary of Terms). These alternative delivery systems have in common that the organization that collects the premiums also provides or arranges for comprehensive services. The functions of insuring and delivering comprehensive care are thus integrated in the organization (see ch. 3).

Medicare and Medicaid recipients could enroll in the competing plans. Under Enthoven's Consumer Choice Health Plan, Medicare beneficiaries could have the Government apply their actuarial cost to the premium of the qualified plan they select (79). The Government would also provide poor people with a voucher related to family income that could be used for the premium of a qualified plan.

Enthoven stipulated that the Government should qualify plans and supervise the enrollment process through a set of rules that apply to all plans. Both Enthoven and McClure would have the plans provide information about premiums, out-of-pocket costs, and benefits covered. This provision seeks to aid consumers' comparison and choice of plans (79,170).

Some of Enthoven's requirements for qualified plans are intended to channel competition away from nonprice aspects and into efforts to reduce costs. Requirements include annual open enrollment, community rating, coverage of certain minimum services, premium rating by market

area, catastrophic coverage, and information disclosure. Coverage of comprehensive care as minimum benefits and enrollment restrictions address the problem of “free riders,” who might buy no insurance until they expect medical expenses. Community rating—uniform premiums within actuarial categories—reflects a belief that the well should help pay for the care of the sick. It also relates to the potential problem of adverse selection, whereby high or low users of services gravitate to certain plans, as described below.

Proponents of greater plan competition emphasize the importance of creating incentives for providers—medical professionals and organizations—to perform efficiently. They point to the largely untapped potential to use medical technologies more judiciously and to hospitalize less frequently. This strategy would rely on alternative delivery systems to rationalize technology use and to achieve lower medical expenditures.

Mechanisms To Promote Cost Consciousness

Both strategies to promote competition advocate changes in taxation so that it has a more neutral effect on health insurance coverage (see table 2). The Enthoven-McClure-Ellwood approach also calls for giving workers a multiple choice of plans (79,170). Although consumers themselves might press for such a choice, mandating it would certainly hasten the process. The intended result of the changes is to instill more sensitivity to price in selection of plans and coverage.

Both strategies would also have insurance cover comprehensive care. Comprehensive coverage avoids encouraging one kind of technology, such as hospitalization or surgery, over another, such as ambulatory or medical therapy. It also permits the combination and location of technologies used to be more responsive to actual relative costs.

Both sets of proposals to increase competition would cover catastrophic expenses and relate payments to income. These provisions are based on social values. Both are intended to prevent financial hardship because of poor health and to prevent income level from unduly limiting the use of medical services.

Table 2.—Comparison of Proposals To Increase Competition

<i>Similarities among proposals</i>		
<ul style="list-style-type: none"> • Taxation more neutral toward medical insurance coverage • Comprehensive benefits standard • Catastrophic coverage standard • Supplementary coverage an available option • Government subsidies for the poor • Income-related payments (for insurance premiums or cost sharing) 		
<i>Differences among proposals</i>		
Provision	Greater patient cost sharing at the time of use	Competition among comprehensive health care organizations
Amount of cost sharing	Emphasized—applied to all services up to annual limit	Reemphasized—possibly as low rates, perhaps for ambulatory care
Multiple choice of plans	Permissible	Emphasized
Basis of premium rating	Experience rating	Community rating
Areawide planning	Yes	Not included
Government role in enrollment	Perhaps provide minimum coverage to everyone	Qualify plans Provide information about plans Enroll members

SOURCE: Office of Technology Assessment

Other provisions of the two strategies differ. The most notable difference is the degree to which they emphasize patient cost sharing. The mainstay of the one strategy is a provision for substantial cost sharing to deter people from seeking care and to pressure providers to practice efficiently. The other strategy would permit cost sharing for ambulatory services up to about 25 percent coinsurance rates (79). However, proponents of this strategy consider cost sharing neither philosophically nor practically appropriate to curb use when people are very sick and would rely instead on the organization that delivers care to rationalize use.

Although all proposals would cover comprehensive care, they leave room for supplementary benefits for the number or kind of services covered. Possibilities include mental health, dental, visual, and long-term care.

Another difference is the basis of premium rating, experience or community rating. This issue has implications for the kinds of people who will select different plans and the likely reactions of insurers. If the insurers can distinguish high and low risks or high and low users of care, and if they may charge people different premium rates,

the insurers will charge higher rates to people likely to incur higher costs and lower rates to the better risks (risk rating). Theoretically, insurers will sell insurance to high-risk people if the premium can be set high enough to make it profitable to cover the expected loss. In fact, there are people who cannot obtain medical insurance, but little is known about their specific circumstances and the influence of high premiums *or* high risk (215).

Adverse selection concerns the behavior of consumers and occurs if consumers know more about their risk status than insurers do (215). Although that is the technical meaning of adverse selection, the term has been used to describe situations in which people likely to be high users choose plans with more extensive benefits and low risks choose plans with less extensive benefits (104). If premium rates are based on the experience of the enrollees, adverse selection and the differential use that follows will raise the premiums of the plans with more benefits and lower those of the plans with fewer benefits.

THE CONCEPT OF COMPETITION

Proponents of increased competition in health care have used the term competition to mean greater regard for price in medical care decisions. Their use of the term also conveys a sense of relying on individuals in the marketplace instead of Government regulation for basic decisions. Indeed, the intention behind increasing people's cost consciousness is to have the market allocate resources efficiently on the basis of price.

The colloquial use of the term competition connotes a contest among rivals: the effort of two or more parties acting independently to secure the business of a third party by offering the most favorable terms (274). However, since competition is an economic term and many of the proponents of the competitive proposals are economists, it is appropriate to consider the meaning of the term in economic theory, and to distinguish the concept of competition from the model of perfect competition in economic theory.

A model, such as pure or perfect competition, is by nature a simplified statement that may

Community rating with uniform premiums and open enrollment would have the well help to support (cross-subsidize) the chronically ill and would reduce "free riders" (people who buy no insurance until they expect medical expenses). Not being able to charge higher premiums for higher risks would give plans an incentive to target their marketing or supplemental benefits to lower risk people and to try to avoid the higher risks. Enthoven has suggested administrative procedures, such as limiting the high-risk people that a plan would have to enroll, to deal with these potential problem areas (79).

The main controversy about premium rating revolves around the extent and method by which medical care for high-risk people should be subsidized. Although this report does not consider further the issue of adverse selection or cross-subsidization, there are alternative mechanisms within either experience or community rating that should be considered before implementation.

depart from reality, and economists readily acknowledge that perfect competition does not pertain in the markets for the vast majority of goods and services, including medical care. Why, then, is so much attention paid to the existence of competition? One reason is that under the theoretical conditions of pure or perfect competition, an equilibrium position results in the most efficient allocation of resources. There is no other allocation that would make everyone better off (such a situation is termed Pareto optimum). With some monopolistic power, a seller can raise its price without losing all its customers; it has some control over the price it receives. Compared with pure competition, with the presence of some monopolistic power, price is higher, quantity produced is lower, and welfare can be improved by producing a greater quantity at a lower price. Competitive conditions are thus used as a standard of comparison for actual market conditions.

Another appeal of competition is the idea that people separately pursuing their own self-interest

will achieve a situation that is best for everyone. This concept resembles the idea of the “invisible hand” attributed to Adam Smith. Like Smith’s ideas, this one presupposes that governmental regulation will create a favorable context and will remedy major problems that arise.

Economics textbooks state certain assumptions about conditions that are necessary for pure competition. The key condition is a large number of buyers and sellers, so that each is small relative to the market and is unable to influence the market price. A related condition is that consumers consider the products that are being traded to be identical or “homogeneous.” Under these conditions a seller would lose all its customers if it independently raised its price; no one would pay a higher price for the same product. By contrast, sellers with differentiated products and monopolistic power have some control over the price and quantity of the products they sell because customers might be willing to pay a higher price for the product they prefer to a slightly different one.

The condition that there be no barriers to producers’ entering or leaving the market ensures that no seller or group of sellers will be able to wield monopolistic power over time. A supporting condition is that the materials and workers needed to make the product can move freely from one industry to another. For perfect competition, the additional assumption is necessary that buyers and sellers have perfect knowledge about market conditions. This condition enables them to reach an equilibrium price (the price that equates the amount buyers wish to buy with the amount sellers wish to sell) without repeated trial and error.

Other assumptions underlie general economic theory and its theory of competition. The doctrine of consumer sovereignty asserts the central importance of individuals’ preferences. Also related to consumers are the assumptions that they have limited incomes from which to make decisions about purchases and that they freely choose what to buy. On the production side, each product is produced as cheaply as possible (technical efficiency), and the prices of materials and workers are not subsidized but reflect their actual costs. It is also assumed that demand and supply are independent.

The theory of competition just cited relates only to the efficient allocation of resources and has not considered the distribution of income or other issues of equity. A position of maximum efficiency does not necessarily entail the best level of social welfare, and may or may not be judged acceptable by political or ethical standards. This caveat applies particularly to medical care, since social values have supported reducing inequality of access to medical care by the poor (97).

Moreover, if some important sectors of the economy are monopolistic, as is the case in the United States, establishing conditions more in conformance with competition in one sector will not necessarily improve the overall allocation of resources, and may worsen it. According to this “Theory of the Second Best,” the conditions to promote efficiency then depend on the particular circumstances involved; there is no general set of conditions that apply (150).

This discussion of competition has thus come full circle to the question of whether or not the promotion of competitive conditions is desirable. A policy in favor of relying on competitive markets to allocate resources has been supported on grounds other than efficiency. One reason given is the relative superiority of markets over political or other administrative methods to coordinate economic activity and avoid surpluses or shortages of goods at prevailing prices (10). There is also a philosophical argument against concentration of power either in monopoly or in Government and in favor of allocation by the atomistic and impersonal operation of the market (237).

Several main points flow from this discussion of the economics of competition. One point is that the term competition has often been used to connote reliance on the market to allocate resources rather than to signify the absence of monopolistic influences; and the alternative to the market has been considered the centralized direction of resources by governmental regulation. Another point is that promoting competitive conditions will not necessarily achieve the most efficient allocation of resources and that efficiency is only one of several bases by which to evaluate the performance of a sector of the economy. The following criteria have been identified to assess the social

desirability of market performance and to constitute a concept of workable competition (12,237):

- *Efficiency.* —Each product is produced and sold as cheaply as possible (technical efficiency), and allocation of resources among different products is most efficient (allocative efficiency).
- *Progress.* —Sellers develop and introduce new products and techniques so that consumers have better products and so that production costs decrease.
- *Quality.* —The quality of products, including

kind and variety, is responsive and accessible to consumer preferences and societal needs.

- *Equity.* —The distribution of income is considered equitable.
- *Full employment.* —Resources, especially labor, are fully employed, or at least the specific market does not impede that overall goal for the economy.
- *Price stability.* —There is agreement about the desirability of the concept, but its definition in a complex economy is unclear (246).

THE MARKET FOR MEDICAL CARE

The current market for medical care obviously does not conform to the theoretical conditions of perfect competition or to the criteria of socially desirable performance. In some cases, the very nature of medical care precludes those conditions. It has been said that competition is workable if there is no clearly indicated change possible through public policy that would achieve greater social gains than social losses (166). The following review of the way medical care diverges from the model indicates that there is much room for improving the present situation and puts into perspective the emphasis on financing arrangements.

The most important cause of the divergence from attainable conditions is the fact that medical insurance has undermined the usual economic assumptions about consumers. As described earlier, consumers often do not bear the cost of using medical services, especially expenditures for hospital services. Insurers, who are uncertain of people's risk status and unable to identify it in any straightforward way, cannot easily separate out the additional and discretionary use that people have because of insurance coverage.

Inefficiencies in the production and delivery of medical care result from the effect of these financial incentives on providers. Individual services are not produced *or* delivered in the most efficient manner, as described earlier, and the combination of technologies used for a given medical condition is often not the least costly for the medical

benefit gained. Nor do the prices of services reflect their true costs. The prices of some technologies, such as radiological services, are often set higher than costs and the excess used to subsidize other services, such as hospital room and board or outpatient care.

There are clearly restrictions on entering the field of medical care delivery. They have been at least partly motivated by the desire to protect people from incompetent providers and to maintain minimum standards of quality. Compulsory licensure of physicians and other health professionals is the most obvious restriction. In addition, hospitals limit the physicians to whom they confer admitting privileges. Certificate-of-need requirements may pose barriers to entry for facilities such as kidney dialysis centers or acute-care hospitals and to new organizations that wish to begin operating in an area. Legal prohibitions on physicians' practicing as employees of an organization and on the corporate delivery of care have been used to prevent formation of prepaid group practices in some areas. As discussed in chapter 1, these issues are important but are not analyzed in depth in this report.

For some kinds of medical technologies, the benefits gained by society are greater than the benefits gained by the individuals who use the care. These "externalities" apply especially to the prevention and treatment of infectious diseases. If there are such externalities, individuals' pursuit of their self-interest may not lead to the most ef-

efficient allocation of resources. Individuals making decisions about vaccinations, for example, will not have vaccination rates that are as high as is socially optimal because they take only their own benefits into account. Governmental programs have historically promoted such technologies through education, subsidies, or regulation. Examples are public health programs to immunize young children and to conduct eye examinations in schools.

Buyers or sellers are often large enough in the market to influence the price that they pay or receive. Union members or employment groups may bargain as a unit with medical care providers, and most hospitals are in urban areas where a few large hospitals have the vast majority of the beds (235). Rural areas or small cities may not be large enough to support numerous hospitals or specialized facilities and still take advantage of the efficiencies from potential economies of scale (97, 172). The equity and quality of having specialized medical technologies accessible, as well as the cost of transporting people elsewhere, may result in a small number of specialized facilities in such areas.

The services of different hospitals, physicians, or other providers are not identical. Physicians of the same specialty differ in their style of prac-

tice, and manufacturers of medical supplies try to draw customers by distinguishing their products from others. This situation, in which there are many buyers and sellers of slightly different services (monopolistic competition), may have little practical effect on the price and quantity of services (10). In medical care, people have the advantage of many options, as well as the associated difficulty of comparing prices and qualities to make purchase decisions.

The desirability of consumer sovereignty in medical care has been questioned. The issues are both technical and philosophical: whether or not people are capable with supplementary information of evaluating medical alternatives, and whether or not people's preferences should predominate (116,190). Physicians may compensate for consumers' lack of knowledge by acting as their agents in making medical decisions (7). But the possibility has also been raised that physicians go beyond an agent's role to generate demand for their own services, a concept that conflicts with the assumed independence of demand and supply. The results of research on this issue have been contradictory (14,215,279), as one would expect of a phenomenon that is difficult to identify and measure.

EFFECTS OF INCREASED COMPETITION: AREAS TO BE EMPHASIZED

The review in this chapter suggests certain areas regarding medical technology that merit particular attention when evaluating the changes that would be likely under increased price competition: 1) the effects on the use and innovation of medical technology, 2) the effects on the quality of care delivered, and 3) the needs of consumers for information. These areas relate to existing problems that have been identified and to certain criteria that have been suggested to evaluate the performance of a market. The criteria of efficiency, progress, and quality figure prominently in each of these areas. Subsequent chapters consider issues of equity, the fair distribution of medical benefits, and costs in each of these subject areas. Full employ-

ment and price stability as aspects of the general economy are not examined separately in this study of the medical care sector. Price stability in particular would be promoted by greater efficiency in medical care delivery and moderation in rising medical expenditures.

The inappropriate use of medical technology has been a longstanding concern of public and private policymakers alike. Both the underuse of cost-effective technologies, such as certain preventive technologies, and the overuse of technologies that confer little or no benefit relative to their costs, such as repeated enzyme tests for cardiac patients, have been cited as factors behind rising

medical expenditures. In fact, one of the motivations of proposals to increase competition is to improve technology use by changing the financial incentives that act on consumers, physicians, and hospitals.

The term appropriate use conveys consideration of the medical benefits as well as the costs of a technology relative to other technologies that might be used for a medical condition and relative to other uses of those resources. This concept has the same elements as that of efficiency, the attainment of a given level of quality for the least costly use of resources. Evaluating changes in the use of medical technology that are likely to result from greater competition thus relates to efficiency, one of the standards proposed to assess the performance of a market.

Innovation or progress is another factor that is highly valued by American society and is used to evaluate market performance. The introduction of new technologies has been a hallmark of medicine in recent decades. Proponents of greater price competition hope to improve the medical technologies that are developed by strengthening the attention that is paid to cost. Whether more price competition will hinder innovation or channel it into more productive areas is an important subject of inquiry.

A basic purpose of the medical care system is the delivery of care of good quality, a factor that is used to evaluate markets generally. The most pervasive policy concern in the present context is the excessive use of technologies, primarily because of rising medical expenditures. There is also an underlying social concern that people be given access to medical technologies that can remedy or improve their health problems. Proponents of greater price competition expect quality to improve with changed financial incentives. Since proposed changes are intended to alter technology use, the likely effects of the different proposals on the quality of care delivered deserve particular attention.

Consumers' lack of information or expertise about medical technologies has been cited as a feature distinguishing medical care from most other markets. Proposals to increase competition, however, place greater reliance on consumers to make choices that ultimately would guide the kind and amount of medical technology that is used. The needs of consumers for information in a more price-competitive system and the likely availability of that information have implications for the ability of the medical market to function smoothly under the changes proposed.