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ASSESSING THE COMPETITIVE

POTENTIAL OF HEALTH-CARE MARKETS

Judith R. Gelman

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ASSESSING THE COMPETITIVE POTENTIAL OF HEALTH-CARE MARKETS

Judith R. Gelman*

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Today, many aspects of the health industry--from capital investment to pricing--are regulated and planned. Some of these regulations are unnecessary and overly restrictive, while others are not. In such a context, the functions best left to the market must be identified before competition can be introduced. The purpose of this paper is to help planners and others concerned with the performance of the health sector assess the potential for encouraging a competitive approach to particular health-service markets. This is done through a series of questions and explanations of the significance of those questions.

A. Introduction

Introducing competition into health-care markets is often opposed, in the belief that "health is different" and that it is too important to be left to the decentralized (capricious) decisionmaking process of the market.[1] Demand for most health

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* Division of Industry Analysis, Bureau of Economics, Federal Trade Commission. The opinions expressed here do not necessarily reflect those of the Federal Trade Commission, individual Commissioners, or other members of the Federal Trade Commission. Richard Craswell, Charles Holt, James Hurdle, Michael Pollard, Steven Salop, Norman Gelman, Carol Scott, and Walter Winslow provided useful comments on an earlier draft. Errors that may remain in this paper are the responsibility of the author.

[1] For an excellent discussion of the factors that make health care different from other goods or services, see K. J. Arrow, "Uncertainty and the Welfare Economics of Medical Care," Am. Econ. Rev. 53 (1963):941-69.

services is caused by illness, which is unpredictable. Some illness has the potential to inflict tremendous harm or even death. Consumers' desires to avoid the unexpected financial liabilities of illness make insurance an important aspect of the demand for health care. The urgent need for treatment, combined with the availability of medical insurance, makes the demand for many health services fairly insensitive to the prices charged.

Medical attention does not necessarily assure restored health. Not only does the efficacy of even the best treatment vary from case to case, but medical personnel also differ in their competence in diagnosing and administering treatment. Patients may be unable to verify the quality of care they receive. Therefore, faith and trust are often integral parts of the physician/ patient relationship. This means that medical ethics and regulations on quality can be important in assuring that patients neither undergo unnecessary treatment nor suffer harm from low-quality care.

The juxtaposition and gravity of these factors are probably unique to health care. Yet, similar problems occur in other industries. Concerns about quality and professional ethics are important in many service industries, from legal services to auto repairs. Unpredictable demand and potentially great consumer injury characterize the market for repairs of various sorts. Insurance affects demand in many other markets. In these ways many service industries resemble health-care.

However, regulation has supplanted competition in health care--far more than in any other service industry. Yet most markets that share characteristics found in the health-care sector operate reasonably well without much governmental intervention and without as many regulatory restraints. Few would contend that competition is appropriate for all segments of the health industry. Still, there is no reason to think that regulation is appropriate for all health-care markets either. Although health care differs from other service industries in a number of ways, it offers many opportunities for competition. The most suitable approach must be determined on a service-by-service basis. Often the most suitable approach is combining competition and regulation.

To decide whether competition or regulation or some combination of techniques provides the best allocation of resources in a particular market, it is necessary to understand both how certain characteristics of the market affect the efficacy of competition and how regulations affect the market as well as how effectively they remedy perceived problems. Analyzing health-care markets is complicated because certain market characteristics and regulatory structures may cause reactions different from those expected in most markets. To help the reader understand how much these market characteristics may thwart the ability of competition to allocate resources in a desirable way, the questions are followed by brief discussions of the distortions associated with natural monopolies,

exit and entry barriers, costly or inaccessible information, the availability of several varieties or quality levels of a service, and third-party-payment schemes. Regulations now in force, while also important, are not discussed as thoroughly.[2]

There are two reasons why competition may improve the performance of many health-care markets. First, minor deviations from the characteristics of the competitive norm typically lead to correspondingly minor distortions in the allocation of resources under a competitive approach. In many health-service markets, distortions from the competitive norm are present only to a small degree. In such circumstances, regulatory intervention can rarely, if ever, allocate resources better than the competitive process can. Second, many of the characteristics of the health-care sector that prevent competition from achieving desirable resource allocation also thwart the regulatory process.

In both these situations, regulatory schemes may do little to improve the outcome of a competitive process. Clearly, the extensive regulatory structure currently in place does not begin to eliminate economic problems in this sector. Indeed, many of the regulations themselves cause further distortions in the market.

The characteristics of the market and the desirability of regulations interact in a number of ways, as follows:

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[2] The author discusses relevant regulations more fully in her paper Competition and Health Planning, Federal Trade Commission, Washington, D.C., April 1982.

- In some health-care markets, the characteristics that may prevent competition from achieving a desirable allocation of resources are created by existing regulatory schemes. For instance, certificate-of-need regulations create barriers to entry and exit.

- The ability of the regulatory process and the competitive process to achieve desirable allocations of resources may be diminished by the same market characteristics. For instance, when consumers lack important information about providers, regulators may do no better than the market at matching patients to the providers best suited to their needs.

- Some forms of regulatory intervention can improve the ability of the competitive process to allocate resources and can decrease the need for other, more intrusive forms of regulatory intervention. For instance, in some situations, providing consumers with improved information about providers can reduce the need for extensive regulation of price and quality.

- Under some conditions, such as those associated with natural monopoly, regulatory schemes can improve the allocation of resources. Under these conditions, it is important to match the regulatory schemes to the needs of the market.

Because health markets differ greatly, they must be examined on a service-by-service basis. Because regulatory structures differ from State to State and because demand for services also differs by geographic region, an analysis of the market must be done at the local service level.

The questions about the market are divided into three parts. The first six questions discuss the role of third-party payers in stimulating competition in the service market. The next seven questions discuss the service from the consumer's perspective. These questions focus on the availability of information, the consumer's discretion in receiving the service, and the consumer's ability to avoid financial risk. The last 15 questions address the competitiveness of the providers, including both professionals and facilities. Here, the ease of entry and exit by providers, the quality and variety of services, and identification of natural monopolies are discussed. Regulatory structures that are now being used are mentioned where applicable.

As a guide to analyzing the market, this list is not exhaustive, and readers are encouraged to formulate more questions in order to fit the guide to their own needs.

B. Reimbursement Schemes

Many health-care services are covered, at least in part, by private health insurance or by public reimbursement schemes. Studying the health financing market is important because competition in the financing market affects the performance of health-care service markets. Studying the health financing market is

also important to corporate decisionmakers because it is often their best instrument for improving the performance of the health sector.

Because health insurance is chosen in advance of medical need, the consumer's decisions in this market are not shaded by the overtones of crisis or emergency that might impede their ability to weigh or interest in weighing alternatives. Third-party reimburse-ment schemes--both public and private--allow consumers to limit the financial risk associated with unexpected illness. As a result, they shield consumers from bearing the costs of health care directly. Third-party schemes give consumers less incentive to shop among similar services on the basis of price or to consider alternative, lower cost forms of treatment, because the cost of care is at least partly covered by a reimbursement plan.

Although consumers have little incentive to shop for lower cost care when coverage is extensive, private third-party payers have an incentive to keep reimbursements down when they must compete for subscribers by offering lower premiums. In a competitive market, third-party payers have the incentive to induce efficiency, to negotiate for lower rates, and to encourage the selection of low-cost providers, because these efforts lower the costs of the health plan. Many experts believe that the greater the competition among private third-party payers, the greater the reimburser's incentives to perform these market-disciplining

functions.[3] Therefore, the viability of a competitive approach to a particular health service depends in some degree upon how extensive third-party coverage is, how much competition there is among third-party payers, and how efficacious this competition is in creating incentives for cost and utilization control.

1. How many major private health plans are available in this market area?

A health plan that has competition from other plans or from Health Maintenance Organizations (HMO's), must work harder to keep down costs and attract customers. Compared to companies with monopoly power, health plans facing competition have greater incentives to negotiate rates aggressively and to pass these savings on to consumers and to their employers.

2. How do these plans compete for customers? Do employers pick a single plan for their employees or do they typically offer several plans and allow the employees to decide?

An employer's selecting a single plan differs from an employer's offering a choice to employees: the employer selects the best plan for a large group of people, while employees select the plan best suited to their own families' needs. Because employees have superior information about their own medical needs

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[3] See, for example, A. Enthoven, Health Plan: The Only Practical Solution to the Soaring Cost of Medical Care (Reading, Mass.: Addison-Wesley, Inc., 1980). Also see F. K. Ackerman Jr., "Competition and Regulation: The Consumer Choice Health Plan Alternative," Medical Group Management 4 (July/August 1980): 58-64.

and their willingness to pay for coverage, they may be able to choose a plan better suited to their own needs. While offering a choice of plans may raise the employer's administrative cost, it is also likely to give greater overall employee satisfaction.

3. If employees are offered several plans, do the premiums paid directly by the employee reflect the differential costs of the plans?

Unless the employees are obliged to pay a higher price for a more comprehensive plan, they have no incentive to pick a "bargain" plan that provides limited coverage at a lower cost. When employees do not pay the cost of their health-care coverage directly, insurance companies have less incentive to offer a wide range of options at varying rates.

Because Federal tax laws make it less costly for employees to receive employer-paid health benefits than to pay the premiums directly, some employers have adopted programs wherein employees opting for less expensive health plans are compensated with other (tax-free) fringe benefits.

4. Do the plans in the area provide coverage for services performed by the same group of providers, or does provider participation differ from plan to plan?

Plans that offer significant alternatives in terms of provider participation and style of treatment give consumers a broader range of medical choices. In this sense, a menu of health plans that includes group-practice HMO's in addition to more traditional plans offers a choice of practice styles as well as premium and copayment levels. Where alternative styles of practice are

attractive to consumers, offering such plans can increase consumer satisfaction with the health-care system. However, many customers' needs are best met by a conventional plan or an independent-practice association. Because competition among plans creates pressure for each to improve, all consumers are best served by having several conventional plans as well as HMO's, all competing for the membership of individual premium-paying consumers. The more the health financing market departs from this description, the more closely it must be examined to determine whether there are competitive forces at work. The more limited the insurance choices, the less likely there is to be competition.

5. Do the third-party payers bargain aggressively with providers?

Third-party payers only provide a market-disciplining force to the extent that they take an active role in the market. Some HMO's, for example, have provided a market-disciplining force in the hospital market by negotiating flat-rate contracts with hospitals. Extensive appropriateness review by dental plans is another example of the active part third-party payers can play.[4]

6. How do third-party payers determine the rates at which they will reimburse providers?

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[4] Providers' collective attempts to resist such aggressive efforts by third-party payers were found to be illegal by a Federal Trade Commission administrative law judge. In Indiana Federation of Dentists, Docket No. 9118, Initial Decision, March 25, 1980, Aetna used dental X-rays to review benefits claims. Concerted efforts by the Indiana Federation of Dentists to refuse to submit such X-rays was found to be an illegal boycott. The case is currently on appeal to the Commission.

Because individuals have less incentive to shop on the basis of price for services that insurance covers extensively, third-party payers must police the market. To do this, such insurers must limit the ability of inefficient providers to pass along their high costs to the insurance company. When reimbursement is based on only each provider's own actual costs, cost reductions mean less revenue for the provider, while cost increases raise the provider's revenue. Under such systems, providers have little incentive to cut costs. In contrast, in reimbursement schemes that are based on an industrywide cost average, revenues do not vary directly with changes in the individual provider's costs. Thus, when costs are cut, the provider receives part of the benefit from its efforts. Problems of comparability make such programs more difficult to administer for institutionally based services, but such programs have long been used in reimbursing professional services. The "usual, customary, and reasonable" system, widely used to reimburse physicians, is an example of a system in which reimbursement levels depend on the charges of all providers in the area. While this system communicates incentives to perform services efficiently, it does not communicate incentives to keep prices low unless consumers' demand for the services of individual providers is sensitive to price. The only way to make the consumer price sensitive is for the consumer to pay some part of the cost of care.

C. <u>The Consumer: How Price Sensitive Is Demand for the Service?</u>

Almost all markets depart somewhat from the ideal of perfectly informed consumers choosing among many sellers. However, in most markets, competitive forces still predominate. How competitive the market is for a particular health-care service depends upon the level of insurance coverage, search costs, information availability, and the degree of discretion the consumer has in purchasing the service.

7. Is the service in question customarily covered by health plans? What part of the costs does the consumer usually have to pay?

When a third party pays a large proportion of the bill, the provider's price is of less concern to the consumer who is paying only a small part of the total bill. The more fully third-party payers cover a service, the less incentive consumers have to search on the basis of price. The state of competition in the health plan market and the vigilance of third-party payers in controlling cost are important components of the competitiveness of such service markets. In addition, coverage by third-parties tends to increase the quantity of the service consumers demand at each market price.

8. Are alternative forms of the service treated differently by third-party payers?

When third-party payers reimburse beneficiaries at varying rates for equivalent services provided by various types of providers or for services performed in different settings, the consumer's choice among providers may be distorted. For example, in an

area where there might be significant consumer demand for nurse-midwifery services, if third-party payers cover obstetricians but exclude nurse midwives, demand could be distorted in favor of the more expensive form of obstetrical care for even the uncomplicated births. Similarly, more extensive coverage and lower copayment rates for inpatient services gives consumers an incentive to use hospitals as inpatients even when same medical conditions could be treated less expensively on an outpatient basis. Unless the consumer's out-of-pocket costs are higher for more expensive forms of the service, the postreimbursement costs consumers face mask the true cost differential.

9. Is the service purchased on an emergency basis, or is "shopping" possible?

The more immediate the patient's need for treatment, the less able the consumer will be to search among providers. In true emergencies, consumers obviously will tend to choose the most immediately available or most familiar provider, as long as some quality threshold is met. When (as in emergencies) consumers do little if any contemporaneous comparison of the prices or qualities of services offered by various providers in the market, each provider has some price power over consumers seeking its services. In contrast, when consumers have the incentive and the time to "shop," no one provider has such power unless it has a monopoly in that market. In general, even if consumers value a service very highly, they will not pay an exorbitant price to any individual provider if they have a chance and an incentive to shop.

Consumers generally tend to be more willing to shop when they can easily gather information about the prices and qualities of services that various providers offer. The more shopping consumers do, the more incentive providers have to compete on the basis of price and quality. Routine obstetrical and gynecological care, well-baby care, and outpatient psychiatric care are of services that typically lend themselves particularly to such shopping. In such markets, competition can allocate resources quite well.

10. How much discretion does the consumer have in receiving the service?

When consumers have a choice whether or not to receive a service, an individual provider has less power to raise prices or to offer unsatisfactory care. When a consumer can satisfy his needs adequately without receiving a particular form of care, a provider of a particular service must offer consumers a satisfactory price/quality tradeoff, even when there is no other provider in the market offering an identical service. Physical exams, preventive dental care, and some types of minor surgery are examples of services in which the typical consumer has some discretion in whether to receive the service and how quickly the service is needed.

11. Are consumers who use the service likely to self-select into plans offering good coverage of that service, or are consumers unlikely to identify themselves as users of the service in advance?

In some cases, such as outpatient psychiatric care and certain types of dental care, consumers of a particular service identify themselves prior to selecting a health plan and select plans partly on the basis of the coverage for that service. In such cases, coverage for that service ceases to be "insurance" in the ordinary sense. When consumers not interested in that service (typically) select other plans, the health plan's coverage of the service becomes a method of prepaying the cost of service--with one important difference: when the cost of the service is covered by a third-party payer rather than being paid directly by consumers, consumers have less incentive to shop among providers. This makes it more difficult to control costs than it would be if most market participants purchased the service without the involvement of a third-party payer. In such cases, instituting payment schedules with large copayments is a particularly appropriate way of inducing shopping behavior.

12. How easily can consumers obtain information about various providers?

When search costs are high (for example, when consumers must have a formal consultation with each provider), consumers are less likely to obtain such information and are therefore less likely to search out the providers offering the price/quality combination best suited to their needs.

In determining whether the costs of search can be lowered, the following questions should be considered. Could the information be centrally gathered and disseminated, and at what cost?

Do providers have an incentive to advertise if not otherwise restricted? How easily can consumers obtain and assess nonprice information about different providers? Can such information be disseminated at low cost?

The more consumers know about providers and the more easily they can act on that information, the better the market is able to police itself. Some information, such as education, certification, or statistics on morbidity rates and their relationship to frequency of service performance (although not now available) might be easily disseminated to consumers. Other information can be gained only through experience with a particular provider. Still other information, such as that needed to decide among drug therapies or types of surgical procedures, cannot easily be summarized for consumers, and medical training is required to understand the tradeoffs involved. In circumstances where consumers are not able to understand and compare the differences between providers, and hence are unable to protect themselves from low-quality or unscrupulous providers, regulatory intervention may be justified.

13. How high are the costs of switching providers? What are its implications for the market?

In many situations, a provider who is not a monopolist stands to lose current customers if experience shows that the price is too high or that the quality is too low. For example, consumers can easily choose to patronize another laboratory, pharmacy, or

optometrist in the future if service is unsatisfactory. Even when, as the case of surgeons, the effects of low-quality care may be irreparable, consumers rarely face significant costs for using different surgeons for different operations.

In other situations, such as long-term care or psychotherapy, switching providers may be quite costly. In these cases, the provider has substantial power to raise its price or lower its quality before the consumer becomes willing to undertake the costs of switching.

Many medical services fall into an intermediate range, in which a moderate price increase may be tolerated before consumers will switch providers. In the case of primary physicians, transferring records to a new provider costs little. However, the physician/patient relationship, including interpersonal information not contained in the medical record, is a valuable part of the long-term and ongoing patronage by a consumer of a single provider.

The higher the cost of switching providers, the greater the provider's power to raise price or lower quality and still retain his patients. In most cases, providers' concerns for medical ethics, reputation, and acquiring new consumers keep providers from exploiting current patients. However, in extreme cases, such as those involving institutionalized patients, the market does not always protect consumers once a provider has been chosen. In these extreme cases, regulatory intervention may be needed to prevent a provider from drastically lowering quality or

raising prices once the patient has become committed to a relationship with that provider. Under these circumstances, regulatory safeguards can improve the ability of the market to operate by allowing consumers to purchase the service without fear of unscrupulous providers. Regulatory safeguards make the competitive approach more applicable, because they allow ethical providers to compete better.

D. The Competitiveness of Providers

A basic component of analyzing a market is identifying current and potential providers of a service and the incentives they face. In some cases, several types of providers or technologies can be used to provide similar health services. When consumers consider several groups to be acceptable substitutes, the fact that they belong to different professions or use differing techniques should not prevent providers from being included in a single economic market. Similarly, providers possessing equipment, facilities, or training that could be altered quickly and inexpensively to provide the service in question also may represent a competitive force in the market.

The number of providers included in the market depends not only on the types of facilities, equipment, and professional training considered as substitutes; it also depends on the geographic boundaries of the market. In health care, the relevant geographic market area may vary considerably, depending on the speed with which consumers must receive the service, the importance they attach to variety and quality, and their ability

or willingness to travel. In some cases, such as rural health clinics or home care, it is the providers rather than the consumers who travel, and their mobility must be considered in delineating a geographic market. Also relevant is how quickly providers currently offering the service in other geographic areas can shift their resources to a new location.

When there are few impediments to entry, when the service is not a natural monopoly, and when there are many potential providers, competition may function effectively despite there currently being only a small number of providers in the region. However, in many health-care markets, third-party-payment schemes, cross-subsidy schemes, and various regulatory restrictions thwart the communication of economic incentives. In these markets, the first step in adopting a competitive approach is to identify and remove these impediments. Doing so will increase the competitiveness of markets.

> 14. How many providers in the area can deliver this service? Can the market sustain more than one provider of minimum efficient scale?

The more providers there are offering service in an area, the more likely it is that competition is working. However, when the cost of providing each unit of the service falls substantially as the quantity supplied increases, having more than one provider in the market will not necessarily lead to lower prices. In such markets, there is a tradeoff between the higher cost of providing each unit of the service and the decrease in market power as the

number of providers increases. In markets characterized as natural monopolies, prices are higher with several providers than with one provider because the increase in competition is not sufficient to offset the increase in costs.

In the rare cases of natural monopolies, regulatory intervention may be called for, to restrain the provider's power over price. In some cases, the benefits of competition can be gained in natural-monopoly settings by using franchise bidding schemes or by basing compensation of the natural monopolist on the costs of similar providers in other markets.

15. How large a capital investment is required to provide the service?

Services characterized by small fixed costs or small minimum-capacity levels in relation to the market are unlikely to be natural monopolies. Only in the case of natural monopolies would the majority of economists hold a competitive approach to be inappropriate.

16. Is the capital physically mobile? Can it be sold to other providers in other areas if there is excess capacity in one market? Can the capital be used outside the health-care industry?

When equipment is versatile and physically mobile, any particular provider will be less able to exercise power over price for any significant period of time; entry will quickly eradicate any excess profits. When capital can be easily moved or can be used in other industries, "cutthroat" competition is not likely to develop; providers may always sell out or move to another market.

17. How easily can new providers enter the market? Is a special license required to provide the service in the area? Can providers from other areas easily enter this market? How specialized is the capital or training required to become a provider? Are providers with training in short supply in the service area? The region? The State? The Nation?

The fewer the barriers (such as special licenses) between geographic areas, the less likely some regions are to have gluts while others have shortages. However, the more specialized the training or other investment necessary to become a provider, the more likely it is that unanticipated increases in demand will lead to temporary nationwide shortages regardless of interstate barriers. The duration of these shortages depends on the length of time it takes to develop new capacity. For example, it takes 8 to 10 years to significantly increase the number of physicians but only 3 to 5 years to build and equip new hospitals. During a shortage, prices may rise above the competitive level and providers may earn high rates of return in competitive markets. These profits serve to entice new providers into the market and do not signal that a competitive approach is inappropriate. The best way to return prices to the competitive level speedily is to remove barriers to entry.

18. If capacity can be used for several purposes, how is it allocated among them?

In a competitive market, providers will have the incentive to put the capacity to its most valuable uses first. Third-party medical reimbursements, by contrast, may distort this incentive.

Reimbursement schemes may also create an incentive for providers to invest in superfluous equipment if investment controls are removed. For the competitive approach to work in a market containing multipurpose capacity, reimbursement rates should be set so that ailments that a lower cost technology could diagnose or treat are diagnosed or treated on more costly equipment only when there is excess capacity. The reimbursement rates should also be designed so that providers have no incentive to build additional capacity to serve low-priority users.

In general, third-party payers give providers the incentive to use capacity appropriately by discriminating on rates of reimbursing various uses of the capital. For example, high-priority uses can be reimbursed on the basis of average total cost, while low-priority uses can be reimbursed on the basis of variable cost. Differentiating reimbursement rates this way gives providers the incentive to allocate capacity to its most valuable use first.[5]

19. Who bears the cost of investment in excess capacity?

If the provider is not at risk when it adds unnecessary capacity to the market, the market alone will not limit supply. Some argue that the poor credit rating of many hospitals provides a brake on unnecessary investment. This contention does not apply

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5 The fine points of such pricing schemes are discussed in the literature on peak-load pricing. See, for example, M. A. Crew and P. R. Kleindorfer, "Peak-Load Pricing With a Diverse Technology," _Bell J. Econ._ 7 (Spring 1976):207-31.

to cases in which reimbursement schemes assure that even unnecessary capacity earns a "fair" rate of return.

In some schemes, reimbursements are based on the individual provider's cost rather than on an industrywide average. Under this type of system, competition will not provide incentives for inefficient providers to leave the market and for efficient providers to remain. A similar situation exists when reimbursement rates allow providers to subsidize unnecessary investments by increasing the price of other services. For competition to work, reimbursement plans should (as far as possible) attempt to reward facilities that face high demand and attain low costs and should avoid subsidizing high-cost facilities or services (especially those that consumers avoid).

20. How are rates for the service determined?

The more freedom each provider (in a market with many providers) has to set its own rates without "guidance" from an association of providers and the more actively consumers or third-party payers negotiate, the more likely it is that the competitive price will prevail. For example, third-party payers may take an active role by unilaterally using a reimbursement formula based on average charges in the area. They may also negotiate contracts that are based on quantity discounts with providers. In both cases, the provider has an incentive to perform services as efficiently as possible.

21. Do providers in the area compete over price or nonprice attributes of the service?

In the absence of price competition, which may be precluded by reimbursement practices, providers may compete for customers on the basis of quality attributes, such as hospital food or advanced technology. Such competition shows that consumers or their agents compare the services offered by different providers and suggests that price competition might work as well, if incentives were properly structured. When price competition can not be introduced, it is neither necessarily desirable nor administratively feasible to eliminate competition in quality or technology, because the optimum quality level is often difficult to identify or to enforce.

22. Who selects the provider delivering the service? Does the agent who chooses the provider have an incentive to compare prices?

The further consumers are removed from selecting the provider of a service, the less discretion they have over its purchase and (in general) the less price sensitive their demand for that service will be. In many instances, consumers may be effectively tied to a certain secondary provider by their choice of primary provider. Consumers may choose the primary provider partly based on its associations with secondary providers, but this is not always the case. For example, in choosing a provider, consumers may ask at which hospital a surgeon, obstetrician, or internist has privileges. On the other hand, in choosing an internist, few consumers consider what laboratory or radiologist a physician is associated with. When there is a relationship between the primary

and the secondary provider but consumers do not consider it when they choose the primary provider, the secondary provider has some control over the price those consumers will pay and the quality they will receive. Thus, how competitive the market for anesthesiology is (for example) depends partly on how competitive the market for surgeons and hospitals is, as well as on the incentives these providers have for choosing the anesthesiologist best suited to the patient's financial and medical interests.

In many cases, the primary provider chooses other providers for the consumer, whether or not there is a formal connection. For example, physicians select the specific prescription drugs with which to treat a patient. Significantly, drug manufacturers focus their attention on physicians rather than consumers, and the promotional material rarely mentions the price of the medicines. However, emphasizing only the nonprice attributes of prescription drugs probably does not reflect consumer preferences. Indeed, many consumers pick pharmacies on the basis of price, and in States with generic-substitution laws, many consumers ultimately pick the drug manufacturer on the basis of price as well. However, the physician, acting as the consumer's agent, does not necessarily have an incentive to consider price in selecting among manufacturers' brands.

Similarly, physicians may select a laboratory on the basis of turnaround time or mutual referrals. The physician may include price as one factor among many in recommending a lab, and may have

little incentive to gather comparative price information on the consumer's behalf.

In these enterprises as in others, there is less price competition than there might be if consumers had the knowledge as well as the incentive to pick secondary providers for themselves, or if physicians were given greater incentives to compare prices on the consumer's behalf. Prepaid health plans are one institutional structure that provides incentives for primary providers to consider costs in choosing secondary providers. They do so by setting a fixed budget with which all health-care needs for members must be covered. Giving the agent who picks the service better incentives to consider costs allows the unfettered market to allocate resources more efficiently.

23. Do consumers or other provider-associates use the presence of certain equipment as a proxy for quality?

When a certain type of equipment or service is taken as a signal of quality, providers have an incentive to invest in that equipment (or service), even if it is not economically self-sustaining. Lack of the quality-signaling equipment may cause the hospital to lose consumers, whether or not those consumers have conditions that call for the equipment. For example, in markets where computerized tomographic (CT) scanners are used as signals of general hospital quality, a hospital may wish to purchase CT scanners even when it has insufficient demand for the scanner itself.

When equipment is used as a signal of quality, regulations that restrict the proliferation of equipment put hospitals unable to demonstrate need at a competitive disadvantage that is disproportionate to the absence of the equipment. A way to combat this unintentional effect of such regulations is to disseminate information about institutional sharing arrangements and other information about institutional quality, so that the presence of such equipment will cease to be a signal of quality. This is an example of using an informational remedy in place of regulation.

24. Is the market characterized by significant cross-subsidization between services? Do entrants have these sources of cross-subsidization? What is the rationale for cross-subsidization?

There are many situations in health care where users do not pay the full cost of the services they use. In these cases, the users of other services must bear the costs of these services.

In some cases, the "subsidy" makes sense. For instance, consumers of obstetrical services pick their hospital or birth center partly on the basis of emergency services available, in case problems arise. Insofar as each user of the obstetrical unit might have used the neonatal intensive-care unit, spreading the cost of neonatal intensive-care units across all users of the obstetrical service is a form of risk sharing. In this situation, individuals paying to support the service might possibly have benefited from its existence.

In other cases, however, a hospital adds the cost of one service to the overhead for another even though there is no logical or clinical relationship between the two. For example, when users of a hospital laboratory (involuntarily) subsidize emergency medical care, they do not benefit more from this involuntary contribution than members of society in general. Although such cross-subsidies may be the hospital's only available method of achieving some socially desirable goal (such as care of the indigent), they create distortions in the quantity demanded of both the subsidized and the subsidizing services.

Cross-subsidies also complicate the issue of entry. Let us say that a given entrant wishes to provide a service that is usually subsidized. It cannot compete effectively without sources of cross-subsidy similar to those of its competitor. In other instances, an entrant may be able to provide a service more cheaply than existing providers only because its prices do not include cross-subsidies for other (unrelated) services. Thus, cross-subsidies make it more difficult to use prices and competition to allocate resources.

25. Who are the potential entrants capable of providing this service? Who finances new entry? Who finances expansion by current providers?

When a service is not a natural monopoly, the threat of entry often keeps prices down and quality up, whether or not entry occurs. For entrants to keep price and quality in line, they must not be at a serious disadvantage in relation to incumbents. In

part, this precondition requires that potential entrants have as much access to financing as incumbents. When incumbents have access to financing at below-market rates (through municipal revenue bonds or cross-subsidy schemes) while entrants must rely on ordinary channels for their financing, entrants may be put at a comparative disadvantage. This disadvantage is unrelated to their own efficiency in providing the service. Thus, the public must twice bear the cost of municipal revenue bonds and cross-subsidy schemes to finance incumbents (but not entrants)--once when the difference between subsidized and market rates is paid and once again when giving the incumbent below-market financing results in a less competitive service market.

26. Might new entrants provide an alternative form of care not hitherto available in the market? Are such potential providers prevented in any way from entering the market?

For certain types of care there are alternatives that cost less than traditional providers of equivalent services. Birth centers, surgicenters, physicians' assistants, and mid-wives are examples of these alternative providers. However, such providers may be discouraged from entering by certificate-of-need procedures and licensing laws. The lack of comparable access to financing from public sources (discussed in the previous question) may also make it harder for alternative providers to enter the market.

27. Are there indicators of consumers' preferences for particular providers or particular forms of the service? Do providers preferred by consumers have an incentive to expand? Do other providers have an incentive to contract?

Certificate-of-need programs tend to take the view that "a bed is a bed." However, from the consumers' point of view, this may be far from accurate. Few service markets are characterized by uniformly excessive demand or capacity throughout the system. Instead, there are often queues for the services of one provider of a service, while another provider could still treat more consumers. Tightly booked schedules, crowded waiting rooms, waiting lists, and similar queues are important signals of consumers' preferences.

In a competitive market, providers offering more highly desired services would increase price or capacity, while providers offering less highly desired services would cut price or capacity. However, in the health-care context, providers reimbursed on the basis of cost have no incentive to respond to demand in this way. Further, even when there are effective reimbursement incentives, institutional constraints (such as CON requirements) may prevent the market from responding to consumers' demands. In such cases, a certificate-of-need process that takes actual demand patterns into account can increase consumers' satisfaction with the system.

Maximum reimbursement limits can also blunt a provider's incentives to expand, even if there are queues. If third-party

payment schemes were made more sensitive to capacity utilization and patterns of consumer preferences, providers preferred by consumers would have the incentive to expand and nonpreferred providers would have the incentive to contract. Copayments can insure that consumers are aware of the actual costs associated with selecting higher quality and more costly providers.

28. Is this service provided competitively elsewhere?

If there is evidence that the service is provided competitively in some geographic areas, a competitive approach may work for the same service in other areas as well. On the other hand, even if the service is currently heavily regulated in every area of the country, a competitive approach may still be appropriate. It simply may not have been tried anywhere yet.

Studying the market where the service is supplied competitively can be quite enlightening. Such analysis may point out, for example, that changes in insurance coverage and in information given to patients may be necessary before adopting a competitive approach. By using markets where the service is supplied competitively as examples, certain changes can also be anticipated. For instance, suppose investment controls are loosened as part of a plan to introduce competition into a given market. When such controls are loosened, the supply of services will probably increase and utilization rates will probably fall. This does not mean that competition has failed but simply that providers are adjusting to the new competitive environment. If such changes are

anticipated, they are less likely to be interpreted as proof that "competition can't work." In addition, understanding the transition to a competitive market is essential to managing it effectively.

E. Summing Up

When the questions above are used to analyze actual health services, few markets will "pass" all tests. Those that do (such as home health care and dental services) are rarely subject to stringent economic regulation. However, in some areas, unduly restrictive licensing requirements and restrictions on some economic aspects of professional practice make the markets for even these services less competitive than they might otherwise be. In such cases, removing unnecessary regulatory barriers can vastly improve the performance of the market.

Many health markets are beset by problems such as costly or inaccessible information, or pricing distortions caused by third-party-payment schemes. These problems do not mean that competition is wholly inappropriate for such markets. Rather, analyzing markets for their competitive potential will show where the problems lie. Frequently, these problems can be alleviated. In the first case, providers could disseminate better information to consumers; in the second case, insurers could restructure the copayment schedules imposed upon insured patients. Interventions of this kind can insure that a competitive approach to the market will work appropriately.

In many health markets, regulatory schemes designed to solve one problem in a market create new, additional problems. Reforming such regulatory schemes is obviously the most direct approach to curing these side-effects of regulation. Until these problems are solved it may not be possible to make these markets more competitive. Unfortunately, administering and reforming many regulations falls outside the scope of local authority. However, if Federal and State regulations change, there will be opportunities for introducing competition in additional markets.

Finally, even under a competitive system, certain goals must be achieved outside the market system. Under the present heavily regulated system, patient education, medical care for the indigent, and other socially desirable health-related services are typically financed through a system of internal cross-subsidies. A competitive system, however, cannot support extensive cross-subsidy schemes. If these social functions are to continue under a competitive system, they will have to be subsidized explicitly.