Is Medical Care Different?
Old Questions, New Answers

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Abstract. This paper examines whether changes in medical markets may be making them more like other markets. The emergence of HMOs and other managed care systems appears to have increased the consumer's potential ability to make better comparative judgments about the price and quality of medical care, and also seems to have made medical care more like other goods. However, the evidence that medical care is a "reputation good" suggests that it is, in this respect, different from other goods. Finally, the social concerns about medical care use necessarily make medical care different.

In answering this rhetorical question a decade ago (Pauly 1978), I tried to distinguish between three kinds of medical care "situations": those for which economic analysis works reasonably well; those for which analysis does not work well; and those for which, under a new competitive framework, analysis might work. Parallel with the question of whether positive economic analysis might explain behavior was the normative question of whether "competition" in some inchoate form might also be feasible and be able to achieve a fair degree of economic efficiency in the various types of medical markets.

My view is that we now have a much clearer understanding of the applicability of economic analysis to different kinds of medical markets, especially to markets for the "potentially competitive" type of service. In contrast to my earlier view, I think both institutional change and the development of new methods of analysis have gone a long way toward filling in the gaps in our ability to apply analysis to medical markets. There is still a good deal left to be learned, but I believe that much of the question of the form and feasibility of competition has been answered. The critical normative question of whether competition can or does produce an efficient outcome also has answers that are surer than they used to be, although there is still considerable room for answering the question posed above with "maybe."

Types of services

In my previous work, my main point of departure was to distinguish these three types of medical services and consider the possibilities for positive and normative
analysis of each. Those types were characterized by the frequency of their purchase, the knowledge the typical consumer had about the value of the service in general, and the appropriateness of the service for the consumer's particular problem. The intrinsic characteristic that separated the three types was how much the consumer knew relative to what the seller/provider knew or could know. "Testing" or trying out some medical services (e.g., a hernia repair) was fairly costly. I was beginning to describe what Mark Satterthwaite and I (1981) later called "reputation goods" (or, as I described them ten years ago, goods whose quality is judged by the experience of the consumer's friends). The point we made then was that there are three types of medical services: those that the consumer consumes frequently enough to be able to judge quality and know price (e.g., pediatric office visits for preschoolers); those that the consumer buys infrequently but the provider furnishes commonly, for which a reputation in principle can develop (perfect reputation goods); and those that are rare for everyone and for which, even in the best of circumstances, reputations or track records will be hard to determine (imperfect reputation goods). Indeed, the market for medical care is almost as much a market for information as it is a market for specific services.

I stand by my earlier conjecture that as much as one-fourth of medical care spending occurs in markets when purchases are consumer-initiated and repetitive and when experience is tolerably good. What I think is new is our understanding of what affects the remaining three-fourths of the spending. Here I will comment on four different influences: the development and testing of a theory of reputation as a constraint on or a substitute for demand creation by physicians; developments in the market for health maintenance organizations (HMOs) and other forms of managed care and the attendant reputation effects; the emergence of a market in information on quality and outcomes; and peculiarities in insurance markets.

Reputation, demand creation, and the market for medical care

Once the consumer has initiated a process of formal medical care and begins to obtain information from providers, there will be an opportunity for providers to alter the content of that advice so as to offset the demand for future services. This phenomenon probably characterizes other kinds of repair services and professional services as well; indeed, it is present to some degree in the advertising or selling efforts which accompany most products. In this sense, if medical care differs from other goods, it is in the relative importance of seller-provided information compared to information gleaned from observing ("searching") the product or experience with the product.

Further development of the theory of reputation goods has indicated that such markets work somewhat differently than the homogeneous good, full information model of competitive equilibrium. In particular, an increase in the number of sellers of reputation goods can lead to an increase in prices. The empirical evi-
dence that Satterthwaite and I examined indicated that this theory did indeed hold in the case of primary care physician services, which were sufficiently subject to out-of-pocket payments to furnish some market effects on pricing. The more recent study by Cromwell and Mitchell (1986) of the pricing of surgical services failed (perhaps not surprisingly) to find similar effects. When there is virtually complete insurance coverage, prices are set by the details of that coverage rather than by the market for care itself.

We also have a clearer theoretical understanding of the limits that a bad reputation can set on the demand creation for reputation goods. Dranove (1983) has developed models which show that demand creation is limited by the negative responses of customers to inaccurate or inappropriate information given by providers. However, we still have no clear empirical understanding of the potential extent of demand creation. There is no doubt that providers could create demand for medical services to a greater extent than would be possible for many other goods. What is not known is whether they will choose to do so, especially in response to changed economic incentives associated with insurer benefit levels and changes in the number of sellers. Nor is it known how much the "tolerably good" services may also be affected by information imperfections. I fear that some part of that marketlike one-fourth of medical care spending may not be so marketlike after all.

For many reasons it is likely that we will never fully resolve the demand creation/information imperfection question. More information will usually (though not always) be better, and other factors (such as the number of sellers and insurer-set price levels) will continue to have potentially perverse effects in the absence of full information. For instance, current proposals to reduce the price of "non-cognitive" physician services (such as surgery) could well lead to an increase in the volume of such procedures in a demand creation model. Thus the fee-for-service market will remain a mystery as far as specific empirical predictions are concerned. But at least we now have a better understanding of why the theoretical ambiguity exists and why it is difficult to resolve empirically.

**Developments in managed care**

Recent real-world developments in the medical market may show a way out of this impasse (although it may only lead to a different impasse). What I have in mind is the development of various "preferred" and managed care systems, including most HMOs (except some of the independent practice association variety), preferred provider organizations (PPOs), and other systems which manage care in part by measuring the behavior of particular providers. While most of the discussion of (and propaganda for) these systems emphasizes the differences between their provider incentives and those of the fee-for-service system, I believe that this distinction is overdone and that it possibly ignores the more fundamental monitoring and measurement advantages that such systems may have.
In particular, such systems almost by definition encourage the potential purchaser to consider information about the relative frequency of good and bad outcomes—that is, to define quality by outcome. Whether potential HMO enrollees actually do make choices on this basis is not known. There is evidence that HMO members are aware of the limitation on their choice of provider that is embodied in plan membership, but in HMOs (as in other settings) the formal evaluation of quality is only beginning. Nevertheless, it is likely that quality concerns will come to the fore, and it is useful to envision what medical markets would be like when and if such quality concerns do become important.

Part of the motivation for seeking information about quality comes from the practice many HMOs have of using multiple physicians. If a consumer knows he will not have a personal physician (about whose competence he might be able to guess based on the last office visit), he will be eager to obtain information on the track record of the HMO’s physicians as a group. And because of the large size of the HMO, the reliability of that information for making judgments will be greater than it could be for any individual fee-for-service physician. As employers become more aggressive proxy shoppers for their employees and as they gather quality and outcome data, purchasers will probably be able to evaluate HMO quality.

In addition, many consumers have been alerted to the “good news/bad news” character of HMO incentives. HMO doctors are not rewarded for unnecessary hospitalization or other use, but they and their firm may gain financially from limiting services. The consumer who sees through the financial incentives in most HMOs may have a legitimate fear of undertreatment, and may seek information to provide evidence that this is not occurring in the HMO he selects.

Finally, the HMO itself has a greater ability to generate and provide reliable information on outcomes than do solo fee-for-service practitioners, since the HMO usually compiles large amounts of internal data for its management and has a marketing obligation to represent itself as being of high quality.

Together, these three factors—need, fear, and opportunity—mean that the ability of the consumer to develop information on the total cost (not just unit cost), outcomes, and quality of the kinds of health care services that represent perfect reputation goods has almost surely improved. Perfection of information will never be achieved—one reason is that perfect information would require prospective HMO enrollees to know the likely outcome for every type of medical event that might occur during the coverage period. However, the information available has certainly improved.

Markets in information

Concomitant with the development of information about HMOs and other managed care arrangements, conventional insurers have shown increased interest in
generating their own data on outcomes and use for the claims information they collect. In my original paper, I pinpointed insurers as the most obvious low-cost source of data on these items, but noted that up to that point, timidity and lack of motivation had prevented such efforts from being pursued. At present, there is much discussion of the use of third-party payer data to provide indicators of quality, outcome, or practice style for individual providers, but the only widespread publication of such information has been in the form of Medicare mortality data from a study not intended for public release. Insurers and managed care systems are using such information for internal management purposes, but the major provider of generally available data has been governmental (usually state) data disclosure systems. Since I would judge both the utility and acceptability of insurer-furnished data to be much greater now than it was ten years ago, the failure of such insurer-provided data to become widely available remains puzzling. Judging from the Medicare experience, one reason may be the possibility that information will not be perfectly accurate and the alleged difficulty consumers have in interpreting imperfect data. Another reason may be the “hostility” providers have toward intentionally invidious comparisons.

The development of publicly provided data, the contemporaneous upsurge of interest among professional associations (e.g., the Joint Commission on Accreditation of Hospitals, the American Board of Internal Medicine) in providing outcome-based performance measures, and the emergence of an industry furnishing measures of severity, outcome, and quality are all reasons to suspect that the medical market is on the verge of remedying much of its information deficit.

I hasten to add that this is not the same thing as saying that conclusive information currently exists. What is being suggested here is an improvement on what existed in the past, not a perfection that can never be achieved. As I noted in my earlier paper, not all of the deficit can be remedied, since much of the ignorance about causes and cures is shared by consumers and providers. Nor does anyone expect every consumer to become a medical expert. However, it is clear that information is becoming more available, and that “proxy shoppers” for consumers are emerging to provide the service of digesting and using this information. PPOs, case managers, and employer assistance in prudent purchasing can all be used to provide consumers with the benefits of more information at low subjective cost.

If this movement succeeds, this market may more closely approximate (even in the “rare service” case) both conventional markets and the ideal of perfect competition. However, there are four potential difficulties with this emerging trend that deserve comment.

The first difficulty arises from the heterogeneity of consumers—a heterogeneity that implies that no single standard of care, method of provision, or protocol can be right for everyone. It is therefore inappropriate, and probably harmful, to try to develop a single “Grade A” measure of quality. There is a rationale for setting minimum standards and for limiting access to the market for types of care which no well-informed person would seek, but there is always a danger
that minimum standards will become a tool to limit competition. Paradoxically, although the greater availability to consumers and buyers of measures of outcomes ought to make minimum standards less necessary, those measures can also become a tool for further limitation. Here again, there is no change from a fact I noted a decade ago—we hardly have any better idea now than we did then of the degree of heterogeneity of consumer preferences.

The second problem is that the availability of measures of outcomes and quality combined with cost or price information compel consideration of a question many in this market would wish to avoid—the occasional necessity of trading off cost and quality. As Schwartz (1987) has strongly argued, there are some situations in which better outcomes can only be produced by applying more inputs. The cheapest hospital in town may not be the worst, but it is unlikely to be the best; to get better care one would need to pay more.

With the availability of information on cost and quality, the necessity to trade one for the other comes into embarrassing conflict with the rhetoric (shared by benefits managers, HMO marketers, insurers, and politicians alike) that the goal is “the highest possible quality for all.” There will be understandable reluctance to publicize decisions to sacrifice quality for cost. The discourse that permits rational discussion of such tradeoffs remains underdeveloped.

The most important advantage to an employee or PPO of an “official” quality measurement system may not be the “truth” of the measurement, but rather the fact that such measures protect a low-cost option from the charge that it is also of low quality. The incentives may then not be to generate a sensitive measure of quality, but instead to target a few bad apples and declare the remainder equally good. Such a situation could correspond with reality, but one should be aware of the incentive to represent the situation in this less threatening fashion, regardless of reality.

The third potential difficulty with new cost/quality information is that when combined with increased political pressure to control outlays on public insurance, it may spotlight the difference in the quality of care that can be bought with what moderately well-to-do privately insured consumers will spend and the quality that can be bought with what Medicare and Medicaid are willing to spend. Providing the evidence that two-class medicine has arrived despite the years of platitudes may result in criticism of the messenger rather than criticism of the message.

Finally, there is the question of how accurate information must be before it can be useful. That the actual provision of fully accurate information is rare is indicated by a program recently introduced in Florida by the Ryder System that provides some limited information to employees on physician fees and credentials (Ricks 1987). The information the plan furnishes is much like the information provided by the various “shoppers’ guides” that were developed by consumer organizations about a decade ago. We do not know whether that information made much difference then, or whether Ryder employees will benefit now. However, it is instructive that Ryder did not provide the useful information on outcomes
it could have pulled from its own insurance data; instead it relied on the "incomplete indicator" of board certification and medical school attended.

The Ryder program bills itself as indicating that "as quality goes up, cost goes down." It actually does nothing of the sort; it only shows that foreign-trained physicians charge more (not that they actually collect more) than American-trained physicians, and it offers no evidence that training is related to outcome. This raises the broader question of whether incomplete information such as Medicare's mortality data or Ryder's fee data is better than no information at all.

It is not difficult to imagine how incomplete information—even when it is correct information—can make consumers worse off. Suppose 20 percent of the physicians in an area are superior in terms of intrinsic quality, 20 percent are inferior, and 60 percent are of average quality. If consumers are completely ignorant and so distribute themselves randomly among all providers, the chance of selecting a low-quality physician is 0.2. Now suppose that low quality is accompanied by a lower price, but a price not low enough to "justify" the lower quality. In that situation, providing information on price might increase the probability of use of low-quality physicians.

As this example illustrates, the critical question is whether incomplete information leads to choices correlated with the remaining errors. Only empirical analysis can tell, but given an assumption of independence, some information (even if it is incomplete) may at best be worthwhile and at worst do no harm (on average). To take the worst case, suppose that poor quality is not at all correlated with good outcomes. Then observing a better outcome in one hospital than in another will be consistent with an expected outcome that is no different at the two hospitals. But if observed outcome is thought to have any chance of being correlated with expected outcome, then there is some potential advantage to choosing the hospital with the better observed outcome. Of course, if the quality is truly no different (on average) in such hospitals and the difference in outcome only reflects unobserved severity differences, then such choices will not do any good—but they will not do any harm either (on average). Imperfect information will not be "fair" to those good-quality hospitals that happen to have severer-than-average case mixes, but competition is not necessarily fair. At best, it is fair only on average.

Making choices this way could be harmful, however, if truly bad quality is associated with less severe case mix. We obviously cannot rule out this possibility on a priori grounds, and more investigation of the correlation between quality and more refined measures of severity would shed light on the matter. A recent study (Dubois et al. 1987) of the relationship between medically defined quality in hospitals and bad outcomes found that on average, the poorer-quality hospitals had more severe case mixes.

There has also been a start in investigating the relationship between price levels, quality levels, entry, and market equilibrium. Von der Schuleenburg (1986) has developed an adaptation of the Klein-Leffler reputation model for physician
services under the assumption that consumers are ignorant about both provider quality and any particular provider's production conditions, objectives, and time preference. One of his conclusions is that the greater the number of high-quality suppliers to begin with, the more likely a new supplier will opt for high quality. Beyond some critical threshold, only producing low quality is not the dominant strategy for new entrants, and regulation presumably becomes less necessary. He also shows that in markets where prices are set externally (e.g., as by the Health Care Financing Administration in the prospective payment system), the higher the price the higher the quality, and the easier entry is the higher quality is relative to price. These results parallel the airline competition models discussed by Joskow (1980) and by Held and Pauly (1983).

A more difficult case is equilibrium in markets where price is also market-determined. The most that one can get out of such models is that where quality is variable, competition can lead to high cost and high quality; an increase in cost can then be socially efficient. One might also note, however, that neither the fixed (exogenous) price model nor the endogenous price model will describe recent history in the U.S. hospital system, with its heavy reliance on cost-plus insurance. In a market with cost-plus incentives, competition need not produce outcomes which are in any way "good."

**Peculiarities in insurance markets**

While the market for information is emerging and while there are some questions about how well it is working (or can work), there are still some peculiarities in the market for medical insurance. The difficulty of objectively determining the amount of damage illness causes (or even of determining exactly what event occurred) results in insurance policies which make payments based on expense levels. The result of such policies is moral hazard.

This characteristic will, in my view, always make medical care different from other goods, although the form that difference takes may vary. Compared to a decade ago, a larger fraction of the population (now about 10 percent) has its medical care use restricted to what a health maintenance organization will furnish. Expenditure control is provided by the supply side rather than by demand-side limits like deductibles and copayments. We also know empirically that HMOs offer a wide variety of organizational structures that are intended to bring about this quantity limitation and a wide variety of levels of performance of care management. Much more so than in the past, the "buy your own regulator" market is a reality.

Recent developments in PPO and HMO arrangements are also pointing toward a new form of what is fundamentally a demand-side limit on expense. In all PPOs (and now in some HMOs) the individual receives partial benefits for out-of-plan use. One way to look at such policies is as indemnity policies similar to those in other forms of insurance, but with the determination of benefits being implicit
in the behavior of the plan rather than explicit in the contract. That is, it is the plan's policy of determining what it will approve as "necessary" that triggers full benefits, rather than the stipulations of a contract. There is always the option of resorting to the courts when the contract is ambiguous.

We seem to be moving toward arrangements in the private sector in which some people choose such implicit contracts while others retain conventional coverage. In the Medicare program, in contrast, there was a shift toward the prospective payment system, which pays what is in effect a per-inpatient admission indemnity but has strong limits on provider balance billing and patient supplementation.

**Conclusion: Is treating medical care the same as other goods a good thing?**

The strongest impression from reconsidering the question of whether medical care is different from other market goods is that medical care appears considerably less different, both in theory and in real-world institutional arrangements, than it did ten years ago. To put it bluntly, medical care is now more "commercial," and we are better off analyzing it as such.

But an important difference—perhaps the most important difference—remaining between medical care and other goods is the disquietude many people feel, or think they should feel, about this "commercialism." This disquietude probably reflects differences in the way people think about medical care. One attitude is thought to be a manifestation of the information imperfection discussed earlier: nonpoor people, knowing that they are imperfectly informed about quality, prefer not-for-profit firms because such firms are thought to be less willing to constrain quality in order to increase profits. Hansmann (1980) and Weisbrod (1977) have both advanced this theory. An implication of my earlier remarks is that improved consumer information may reduce the relative attractiveness of the not-for-profit firm, since the not-for-profit firm is most valuable when consumer information is imperfect. When (and if) hospital quality can be measured, one will have less to fear from the closely monitored for-profit hospital of the future than from its current unconstrained counterpart.

Another difference between medical care and some other goods is that medical care is an object of social concern. I care about my neighbor's consumption of medical care. There are other goods which are similar objects of concern—housing, nourishing food—and in all cases this concern evokes some type of goods-specific subsidy, both public and private. Indeed, it is the motive for private charity that is specifically directed toward my neighbor's use of medical care (rather than his general well-being) which motivates my donation to my community hospital. I choose a nonprofit producer in order to avoid having to gather information on whether or not my donations are used for their intended purpose.

What remains to be determined is whether medical care differs even from other "altruistic externality" goods. Is the object of our concern the attainment of an
adequate level of care use (even if it may be lower and achieve a lower level of health and well-being than what the well-to-do achieve), or is it equality in use and/or outcome? The President’s Commission (1983) and I (1970) took the first view, but Thurow (1984) and Lindsay (1969) emphasized the second.

The emergence of explicit two-class medicine, aided by a market which more efficiently caters to diversity and is less willing to tolerate the earlier pattern of private cross-subsidies with other patients’ money, may force taxpayers to confront the ticklish question of how much they are really willing to buy for their neighbor compared to what they would buy for themselves. Politicians may be successful in pushing this question—which has just emerged from under the provider cross-subsidy rock—under the rug of mandated employer benefits, leading to probably the first politically attractive head tax. But the determination of whether medical care really is different is ultimately a political question.

References


