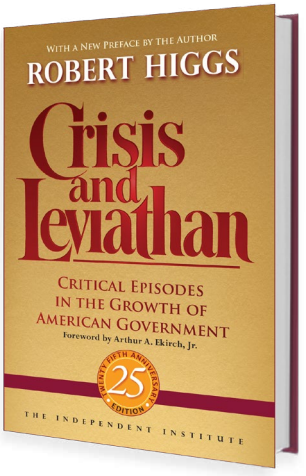
SUBSCRIBE NOW AND RECEIVE *CRISIS AND LEVIATHAN** FREE!

"***The Independent Review*** does not accept pronouncements of government officials nor the conventional wisdom at face value."
—**JOHN R. MACARTHUR**, Publisher, *Harper's*

"***The Independent Review*** is excellent."
—**GARY BECKER**, Noble Laureate in Economic Sciences

Subscribe to ***The Independent Review*** and receive a free book of your choice* such as the 25th Anniversary Edition of ***Crisis and Leviathan: Critical Episodes in the Growth of American Government***, by Founding Editor Robert Higgs. This quarterly journal, guided by co-editors Christopher J. Coyne, and Michael C. Munger, and Robert M. Whaples offers leading-edge insights on today's most critical issues in economics, healthcare, education, law, history, political science, philosophy, and sociology.



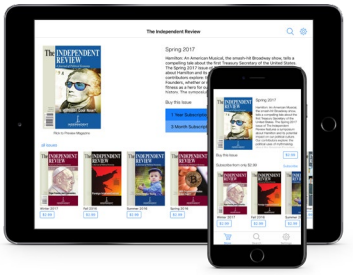
Thought-provoking and educational, ***The Independent Review*** is blazing the way toward informed debate!

Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!

*Order today for more *FREE* book options

SUBSCRIBE

Perfect for students or anyone on the go! ***The Independent Review*** is available on mobile devices or tablets: iOS devices, Amazon Kindle Fire, or Android through Magzter.



Download on the App Store | Available at amazon | Available on MAGZTER

INDEPENDENT INSTITUTE, 100 SWAN WAY, OAKLAND, CA 94621 • 800-927-8733 • REVIEW@INDEPENDENT.ORG PROMO CODE IRA1703

Information Asymmetries in Health Services

The Market Can Cope

STEPHEN SHMANSKE

According to mainstream health-care economists, special properties of health service delivery—adverse selection, moral hazard, asymmetric information, monopoly, ethical concerns, and agency—make health care different from other goods (Carlstrom 1994). Economists claim that because of these properties, private competitive markets cannot provide health care efficiently. Various nonmarket institutions and government interventions have been put forward on a piecemeal basis to remedy the alleged market failures.

Unfortunately, because the various problems are interrelated, the interventions often work at cross-purposes, and therefore consumers suffer. For example, one type of asymmetric information occurs because the doctor typically has knowledge the patient does not—that's why the patient sees the doctor in the first place. Ostensibly to protect the patient from charlatans, governments enforce licensing provisions overseen by state medical associations. This industry self-regulation, however, gives rise to other problems: impeded entry, lessened competition, and stifled innovation.

Indeed, government's attempts to fix one problem often make others worse. The interventions exacerbate problems not because those who design the interventions have bad intentions but because they fail to appreciate and take properly into account economic scarcity. If the market really is failing, then perhaps some technical intervention such as price control, a tax, or a subsidy is warranted. But such measures do nothing to alleviate scarcity. In

Stephen Shmanske is a professor of economics at California State University, Hayward.

The Independent Review, Vol.I, No.2, Fall 1996, ISSN 1086-1653, Copyright © 1996, pp. 191-200

fact, these measures consume resources, because they are costly to impose and, on the other side, to avoid or render less burdensome.

My argument here is that several of the alleged market failures in the provision of health services actually reflect economic scarcity. Hence they are best dealt with by market institutions, not government interventions. I shall focus on asymmetric information that leads to adverse selection and moral hazard in health insurance markets, and on possible conflicts of interest in the doctor-patient relationship. The problems that arise in these areas are not really market failures that warrant government intervention. Rather, these problems arise because of economic scarcity and can be dealt with most efficiently through free-market institutions. The common interpretation of these problems as market failures evinces a fundamental misunderstanding and misapplication of basic economics.

I shall proceed by first explaining briefly the conventional wisdom underlying the market-failure claims associated with asymmetric information, then showing how the claims arise from naïveté about the meaning of market efficiency and the roles played by markets and governments in alleviating scarcity.

Adverse Selection

Adverse selection arises when heterogeneous buyers of insurance have information about their own risk that the seller does not have. If the seller prices the insurance at the average cost of insuring a whole group, then consumers in that group who would impose less than the average cost balk at purchasing coverage.[1] Because the rest of the population will impose above-average cost, the insurer will have to raise the price, causing additional customers to decline the coverage. In equilibrium, only customers with the highest expected costs (as well as the most risk-averse) buy full coverage. A secondary market supplying partial coverage to those who decline to transact in the higher-priced market may develop in what is called a "separating equilibrium." Or, under some conditions, there may be no equilibrium in the simplest sense (Rothschild and Stiglitz 1976).

The market equilibrium, or lack thereof, that develops does not match the equilibrium that would be reached if the seller knew everything the individual buyers know about their risk. With symmetric information, a seller would charge each customer his or her expected cost, and the risk would be fully transferred from insured to insurer. Once transferred, the risks would be eliminated through diversification by the pooling of a large number of independent risks.[2]

1. Actually, some such consumers, if very risk-averse, may buy the insurance even at an actuarially unfair price.

2. For a different application of adverse selection, in the setting of employer-offered "multiple choice" programs, see Feldman and Dowd (1991), Marquis (1992), and Jones (1990).

Some economists say that the market fails because the market equilibrium (or lack thereof) under asymmetric information is inferior to the equilibrium under symmetric information. Sure enough, this is true when one supposes that information can be acquired costlessly, all risks are transferred and insurance coverage is complete; and in real markets, in contrast, coverage is incomplete. But it does not follow that this difference in outcome signifies a market failure.

The ideal of the equilibrium under the condition of symmetric information is irrelevant when in fact it is costly to transfer information credibly. Claiming that the market fails in this instance is akin to claiming that gasoline markets are inefficient because the market price is higher and the quantity sold lower than the corresponding amounts in a model where crude oil is free. When a model assumes that information transfer (or crude oil) is free, the model's optimum is conditional on that assumption. To apply such a model to actual conditions, finding a discrepancy between the model's optimum and actual outcomes, is to misapply the model, not to identify a market failure.

Adverse selection does not cause a market failure; it merely manifests an actual underlying problem, which is the scarcity of information. Useful information, like crude oil, is costly to obtain. When market participants do not have complete information, the market will not—and should not—operate as it would if information were costless. The difference is not indicative of market failure in any helpful sense.

My point is not merely semantic. If a genuine market failure exists, then conceivably the government—given sufficiently low costs of its own actions and barring any distinctive failures of its own—might intervene in a helpful way. But if the market is not failing in the first place, there is no possibility of advantageous intervention.

If the problem is scarcity, how can government intervention help? Government can use its coercive power to alter a market equilibrium, of course, but if it does so, two new problems arise.

First, government officials receive no feedback creating an incentive for them to innovate, produce, conserve, or do anything else to alleviate the scarcity. In contrast, in the private sector the profit motive encourages people to use resources efficiently; losses and bankruptcy punish those who waste resources. Competition guarantees that market participants cannot just ignore these incentives. Therefore, the obvious direct approach to dealing with problems of scarcity is to allow profit seeking in free markets with private property.

A second problem is that, even in traditional cases of market failure, government coercion may be unnecessary as a means of bringing about mutually gainful improvements. Voluntary bargaining, contracting, and exchange can often overcome problems associated with externalities (Coase 1960), free riding (Coase 1974; Brubaker 1975), and public goods (Shmanske 1991).

Governments that do intervene often make a fundamental error. They naïvely attempt to impose some condition derived from a simplified, irrelevant model. For example, because an attribute of the symmetric information equilibrium is that everyone gets insurance, governments make full coverage a goal to be achieved through intervention. Curiously, full coverage can be achieved at a price equal to the average cost if neither side has information about individual risks. The government can impose this solution by forcing everyone to buy insurance at the average cost (universal coverage) or, alternatively, by prohibiting either side from gaining access to information in the first place.[3] But forcing this one aspect of the unattainable symmetric-information equilibrium is as ill advised as fixing the price of gasoline equal to the price calculated from a model that assumes crude oil is free. A theoretical optimum calculated from a model that assumes away the cost of information is the wrong condition to seek.

The free market's own equilibrium is the right one. It creates the proper incentives to innovate or discover low-cost ways to signal the relevant information so that it can be put to use. Most fundamentally, what is needed to ameliorate the problem of scarce information is entrepreneurship that reduces the cost of information transmission. Government intervention does not fulfill this need; indeed, the intervention hinders the fulfillment by displacing genuine entrepreneurship (Kirzner 1973). Consider just one example of the market's ability to credibly transfer information about individual health risks: employee groups can negotiate low group rates for insurance because the individual risks in the group are diminished by diversification with other members of the group, and also because steady employment itself may signal below-average health-care costs.

In a free-market equilibrium, a degree of adverse selection remains because it is never costless for the insured to signal all relevant private information. This degree, however, is optimal: it is the amount from which further reductions in adverse selection would cost more than they are worth.

In sum, government intervention to "solve" the problem of adverse selection fails to confront the true problem. Moreover, it creates a new problem of inefficient incentives, known as moral hazard.

Moral Hazard

Moral hazard occurs in health-care markets when a third party, usually an insurance company or the government, pays for the service received by the patient. Patients will continue to consume services as long as they value the additional service at more than the additional cost they bear. If a third party pays all or part of the cost of additional care, consumers will demand more care than they would otherwise. In the standard graph used in economic

3. In the debates about the ethics and efficacy of genetic screening, some argue that we might be better off without certain information (Knudson 1994).

analysis, this overconsumption of service appears as a movement down a given demand curve to a quantity greater than that corresponding to the equality of demand price and (all) marginal cost. This inefficiently excessive use of services is a problem, but moral hazard is a separate compounding problem.

The moral hazard arises because the consumer who pays only part or none of the marginal cost of services will knowingly take unhealthful actions and eschew healthful ones. As a result, the consumer's health worsens, which leads the consumer to want more care. Graphically, the demand curve for care shifts outward from its original position. For example, smokers who are nearly indifferent about whether they should continue to smoke or quit will be more likely to continue smoking if they expect the costs of future smoking-related illnesses to be paid wholly or partly by a third party. In another example, sixty-four-year-old persons, knowing that their health-care costs will be paid next year by Medicare, may delay treatment that otherwise they would seek now, thereby exacerbating the difficulty and cost of their (later) treatment. Thus, moral hazard encompasses both sins of commission and sins of omission. In either case, health-care costs rise.

Increased costs for the third-party payer ultimately have to be borne by consumers either as taxpayers or as premium payers. If the insurer can adjust premiums to make high-volume users pay extra, then some incentive to restrain demands for service is restored to the system. This restraint enhances efficiency, as it causes individuals to take precautionary actions such as exercising or quitting smoking when they value the premium reductions more highly than the alternatives forgone. If the premium is set at average cost regardless of the behavior of the individual insured, then no one has an incentive to take further precautionary measures. To the extent that the problem of adverse selection is treated by placing all the insured into the same pool and charging each person the average cost of coverage, the problem of moral hazard grows worse.

One market attempt to overcome moral hazard is the creation of the health maintenance organization (HMO), in which the third-party payer and the health-care provider are the same. In this setup, excessive demands for service can be monitored and overconsumption forestalled. The system has its critics, however, because it creates a conflict of interest between the doctor as care giver and the doctor as residual claimant.[4]

Typical government attempts to control overconsumption involve prioritization of allowable procedures (Fox and Leichter 1991), rationing by waiting (Miyake and Walker 1993; Iversen 1993), other nonprice rationing techniques, and, if quantity controls fail, price controls, which were a central feature of the Clinton administration's proposals for national health-care reform in 1994. Such interventions have well-known deleterious effects.

4. For statistical evidence on the ability of HMOs to reduce costs, see Olsen (1993).

Further, by dealing with the symptoms (high costs and excessive consumption) instead of the cause (asymmetric information between the patient and the third-party payer), government interventions mask the basic issue of economic scarcity, thereby inhibiting and delaying proper understanding and solution of the problem.

The straightforward, if naïve, solution for moral hazard is to dispense with third-party payers. People who must pay for their own health care will not overconsume it. But this solution conflicts with the desirability of an insurance market to shift and spread risks. Individuals may not want to pay for their health care out of pocket because of the uncertainty about how much that will cost; hence they demand insurance to smooth their expenditures for health care. Unfortunately, moral hazard attends this solution. Moral hazard, however, should be seen as simply another aspect of economic scarcity.

Presumably, market participants will try to develop arrangements (HMOs, copayments, deductibles) that reduce the overconsumption arising from moral hazard so long as the expected gains exceed the expected costs of doing so. This sort of innovation is tricky, however, because although the insurer is willing to pay for health-care costs that are truly unexpected by the individual insured—the reason for insurance in the first place—the insurer does not want to bear costs arising from overuse prompted by the payment arrangement. Similarly, the insured is willing to pay premiums that cover the risk of unexpected health-care costs but prefers an arrangement without built-in incentives for overuse for which consumers ultimately must pay. Both the insurer and the insured want risk transfer without moral hazard. Unfortunately, economic scarcity makes it inherently costly for the insurer to distinguish between desirable and undesirable expenditures to care for the insured and inherently costly for the insured to credibly commit to avoid overconsumption. Given the underlying scarcity and hence the costs of the relevant information, in equilibrium some moral hazard remains. But inasmuch as further reductions in moral hazard would cost more than they are worth, the remaining moral hazard is the efficient amount.

It is crucial that one distinguish between, on the one hand, an optimal insurance contract voluntarily entered into by both parties and including a mutually agreed amount of signaling and monitoring and, on the other hand, an imposed socialization of health risk through government insurance. The latter may eliminate adverse selection, yet it will fail nonetheless if excessive moral hazard causes skyrocketing costs. Voluntary coverage will not achieve universal coverage, nor will it completely eliminate adverse selection and moral hazard, but the amounts of coverage, adverse selection, and moral hazard will be economically efficient.[5]

Although no one knows for sure, a type of contract still awaiting discovery may simultaneously permit risk sharing, avoid adverse selection, and

5. For recent theoretical work on the optimal contract, see Stewart (1994).

control moral hazard. The likelihood that it will be discovered is greater if buyers and sellers in health-care markets are allowed to transact freely. People can experiment with many types of contracts and arrangements simultaneously in the market process. But imposition of a one-size-fits-all government program puts all the eggs in one inflexible basket determined by its political viability. To suppose that the one "best" government program awaits discovery by the brightest minds with the best information is to ignore economic scarcity. In reality, the relevant information to achieve optimal health-care delivery is dispersed among doctors, patients, and insurers and changes over time. The relevant information cannot be gathered in one place at one time to achieve a permanently optimal universal arrangement (Hayek 1945). To suppose otherwise is to commit what Friedrich Hayek called the "fatal conceit" (Hayek 1988).

The Doctor-Patient Relationship

Asymmetric information usually affects the doctor-patient relationship. As a rule the doctor has relevant information that the patient lacks. Therefore, conventional wisdom tells us, markets fail to operate efficiently. Buyers and sellers cannot trade efficiently if one side of the transaction can be manipulated or charged excessively because of inferior information.

Again, however, it is unwarranted to conclude that the actual market fails because the outcome is different in a model with no asymmetric information. Such comparisons are irrelevant and commit the nirvana fallacy. In reality, information can be credibly conveyed across an exchange relationship only at some cost. Comparing the market solution with the solution in a model without such costs tells us nothing of value.

The information asymmetry in the doctor-patient relationship is simply another case of scarcity with which the market can cope. If allowed to do so, individuals interacting in markets continually discover new ways to transfer information and police those who might attempt to exploit less-informed trading partners. For example, with repeat purchases and long-term relationships at stake, the market will reward doctors who can verify that they honestly convey their private information; it will punish those seen to exploit their patients. There is nothing unique about asymmetric information between doctors and patients, as sellers and buyers often have asymmetric information. Getting a second opinion in health-care markets is comparable with comparison shopping in other markets, yet no one claims that markets fail because prudent buyers of clothing expend time, effort, and resources shopping or because would-be homebuyers order termite inspections.

Ostensibly to make sure that all practicing doctors are competent to provide medical care, governments require them to graduate from an accredited medical school and to be licensed to practice by a state board. Although these requirements may weed out the most grossly unqualified—at

the cost of excluding others who are or could be qualified—they have two serious defects. First, the patients still have no guarantee that competent, licensed doctors will not use their informational advantage for personal gain. Second, the licensing may lull the patients into a false sense of security that leaves them more susceptible to exploitation.

The first drawback exemplifies what is known as an agency problem. Agency theory applies whenever someone, called the principal, wants to do something and arranges for another person, called the agent, to accomplish or help accomplish the task. In general, the agent has different motivations, desires, and information than the principal and, as a result, will not carry out the task exactly as the principal wishes. In view of this agency problem, principals must bear costs either to monitor the agents or to establish incentives for agents to perform more appropriately in the absence of direct monitoring.

Agency theory in the context of the doctor-patient relationship has been discussed by Gavin Mooney and Mandy Ryan (1993). Here the principal is the patient who wants to obtain health care. The patient hires an agent, the doctor, who may have motivations other than providing the optimal amount of service at the lowest feasible price. The doctor's personal motivations may lead to ordering extra tests mainly to earn money or protect the doctor from potential legal liability; to prescribing more expensive drugs, to gain favor with pharmaceutical companies; and to using reciprocal referrals to specialists in other fields, to increase income.

Again, the market develops and encourages the further development of contracts and other arrangements to cope with the agency problem. As long as the principals and the agents are free to negotiate with each other and free to withhold either their services or their business, market incentives will lead people toward efficient outcomes. Government intervention cannot help. Any forced intervention that helps could have been agreed to voluntarily by the parties. But intervention can easily make transactors worse off by forcing an interaction that either the principal or the agent does not want or by prohibiting mutually agreeable interactions that the parties do want.

Licensing provisions do not meet the patient's need for information to determine whether the physician is providing the correct treatment. Instead, licensing attempts to take the problem out of the patient's hands by assuring that all doctors will always provide proper treatments. At best, this arrangement solves the problem incompletely. To be sure that they are not being exploited, patients still must bear costs to find out about the care they are purchasing. The information they need is valuable to them, costly to obtain and, presumably, if the market is not impeded, will be supplied efficiently. Absent the present system, perhaps something akin to the quality-rating agencies in other industries, funded by patients' groups, would flourish. At present, government-enforced licensing reduces the vigor

with which private means of information generation are pursued.[6] If patients rely on information supplied by governments or physician-sponsored groups, they are likely to lose all the close calls.

Conclusion

Economics has been called the dismal science because economists so often point out to consumers, providers, or policymakers that people cannot magically satisfy their desires if scarcity dictates otherwise. One can ignore scarcity, hiding costs or shifting them to the benefit of some and the detriment of others, but the basic constraint of scarcity remains. Those who call attention to such economic realities are often labeled naysayers or curmudgeons, and sometimes the discussion never gets beyond shallow analysis, name-calling, and political maneuvering. But the problems remain. Far from being solved, they are not even properly confronted by existing or proposed policies.

It is fashionable to interpret any unfortunate human experience as a case of market failure. Intellectuals often invoke this interpretation to justify government intervention. Sad to say, the practice of claiming market failure and proposing interventionist policy has become so established that many discussants have forgotten to attend to the fundamental issue of economics, namely, scarcity. But if scarcity is the underlying cause of a problem, this approach is doomed to fail. The best that society can do is to balance costs against benefits at the margin. The market is the institution in which the individuals who actually experience the costs and benefits undertake such balancing. In health services, asymmetric information arises from economic scarcity, because—like it or not—information is costly to obtain and credibly transmit. Government policies ignore or attempt to hide these costs. The market allows, indeed requires, people to confront them directly and creates incentives for dealing with them efficiently.

References

Brubaker, Earl A. 1975. Free Ride, Free Revelation, or Golden Rule? Journal of Law and Economics 18 (April): 147–61.

Carlstrom, Charles T. 1994. The Government's Role in the Health Care Industry: Past, Present, and Future. Federal Reserve Bank of Cleveland Economic Commentary, 1 June.

Coase, Ronald H. 1960. The Problem of Social Cost. Journal of Law and Economics 3 (October): 1–44.

6. For a more general model of government preemption of private activity, see Shmanske (1996).

———. 1974. The Lighthouse in Economics. Journal of Law and Economics 17 (October): 357–76.

Feldman, Roger, and Bryan Dowd. 1991. Must Adverse Selection Cause Premium Spirals? Journal of Health Economics 10 (October): 349–57.

Fox, Daniel M., and Howard M. Leichter. 1991. Rationing Care in Oregon: The New Accountability. Health Affairs 10 (Summer): 7–27.

Hayek, Friedrich A. 1945. The Use of Knowledge in Society. American Economic Review 35 (September): 519–30.

———. 1988. The Fatal Conceit: The Errors of Socialism. Chicago: University of Chicago Press.

Iversen, Tor. 1993. A Theory of Hospital Waiting Lists. Journal of Health Economics 12 (April): 55–71.

Jones, Stanley B. 1990. Multiple Choice Health Insurance: The Lessons and Challenge to Private Insurers. Inquiry 27 (Summer): 161–66.

Kirzner, Israel M. 1973. Competition and Entrepreneurship. Chicago: University of Chicago Press.

Knudson, Tom. 1994. The Dark Side. Wall Street Journal, 20 May.

Marquis, M. Susan. 1992. Adverse Selection with a Multiple Choice among Health Insurance Plans: A Simulation Analysis. Journal of Health Economics 11 (August): 129–51.

Miyake, Joanna, and Michael Walker. 1993. Waiting Your Turn: Hospital Waiting Lists in Canada. Fraser Forum (May).

Mooney, Gavin, and Mandy Ryan. 1993. Agency in Health Care: Getting beyond First Principles. Journal of Health Economics 12:125–35.

Olsen, Reed Neil. 1993. The Impact of Health Maintenance Organizations on Health and Health Care Costs. Applied Economics 25:1451–65.

Rothschild, Michael, and Joseph E. Stiglitz. 1976. Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information. Quarterly Journal of Economics 90 (November): 629–49.

Shmanske, Stephen. 1991. Public Goods, Mixed Goods, and Monopolistic Competition. College Station, Tex.: Texas A&M University Press.

———. 1996. Contestability, Queues, and Governmental Entry Deterrence. Public Choice 86 (January): 1–15.

Stewart, Jay. 1994. The Welfare Implications of Moral Hazard and Adverse Selection in Competitive Insurance Markets. Economic Inquiry 32 (April): 193–208.

The author gratefully acknowledges comments by the editor and a referee that helped provide focus to the paper.