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Can Managed Competition Solve The Problems Of Market Failure?

by Jonathan E. Fielding and Thomas Rice

Because health care is not a typical economic good, unfettered competition is likely to result in market failure. This paper explores whether the use of “managed competition” will make it possible to enjoy the fruits of additional competition without market failure. We conclude from our analysis that managed competition has the potential to solve some, but not all, of the problems that result from the failure of a purely competitive marketplace.

We begin by presenting an economic concept called the “theory of the second best,” which gives a framework for why more competition may not always be better. We then provide several examples in which the application of increased competition likely would result in undesirable policy outcomes. This focus “sets up” our analysis of the extent to which the tools of managed competition have the potential to address market failure brought about by increased competition in the health care sector.

This Commentary is not intended to provide a thorough evaluation of managed competition. Rather, it deals with the topic only insofar as managed competition can or cannot solve problems of market failure in the health care system. There are many other important aspects of managed competition, such as risk adjustment, whether managed competition can work in rural areas, and so forth, which we address only in passing.

Economic Efficiency And The Theory Of The Second Best

Economics shows that if certain conditions are met, then allowing competition to operate unencumbered by government interference will result in economically efficient outcomes. Aside from the fact that this result ignores equity considerations, it is hard to disagree with the desirability of increasing efficiency. Several conditions must be met for such an outcome to occur.1 First, there must be numerous producers and consumers, and free

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entry into the market. Second, the goods and services produced must be homogeneous, and consumers and producers must possess good information regarding the price and quality of alternative choices. Third, there must be no major externalities in production or consumption.²

There is little doubt that some of these conditions are not met in the health care market. The major problem lies with the second point: Products and services produced in the health care market are anything but homogeneous, and consumer information is limited.

On the surface, it would appear that enhancing competition would always be a good policy, since fulfillment of the conditions listed earlier will result in an economically efficient state of affairs. Interestingly, however, this is not the case. There is another axiom in economics called the theory of the second best, which states otherwise.

According to the theory, if a number of factors cause a market to deviate from the competitive conditions listed above, then it is not necessarily appropriate to try to make the market more competitive in other areas.³ Increased competition can ensure efficiency only if just one aspect of the market deviates from the competitive conditions. Suppose, for example, that two of the competitive conditions do not hold: There are few firms, and consumer information is poor. The theory of the second best implies that enhancing competition, by increasing the number of firms or by improving information, will not necessarily bring us any closer to an optimal state, and in fact, may have the opposite effect.

Why might this be the case? In the example cited above, if there are a limited number of firms, then better information about price might allow firms to set prices as in a cartel. Each would know what the others are charging, and each might realize that by keeping prices at a cartel level, they will all make higher profits. Similarly, if information were limited, then as the number of physicians in an area rises, it becomes increasingly difficult for consumers to keep track of prices and reputation in the market. As a result, consumers might have to pay higher physician prices.⁴ Thus, the theory of the second best shows that increased competition may not always be desirable.

Undesirable Results Of Competition

Here we describe five instances in which more competition could interfere with reaching desired policy outcomes.

More health plans. An increase in the number of insurance carriers or health plans could result in higher health care costs and in reduced access to care. In a competitive market, more health plans ideally should result in lower costs and greater efficiency because plans would compete partly on
the basis of premiums. Almost certainly, more plans would be efficiency-enhancing if previously there was only one in a particular market; this would reduce that plan’s ability to set prices as a monopoly. As the number of health plans increases beyond some threshold, however, each has less market power over individual providers. Because of this, plans will be at a disadvantage in bargaining with providers, and the price they receive may not be as low as it would be otherwise. Consequently, this reduced leverage may result in higher prices charged to subscribers.

An example of this problem is the experience of preferred provider organizations (PPOs). In 1988 the typical insurer-sponsored PPO had 155,000 eligibles, and 13,000 physicians. Thus, on average each physician had only eleven enrollees from a particular PPO, who may not have even used the PPO network. PPOs therefore have little bargaining power over providers since they are responsible for so little of each provider’s practice. In fact, recent studies have almost universally concluded that PPOs do not reduce health care costs, or that they even raise them. This is primarily because they cannot overcome the increase in costs that stems from increased demand for services (as a result of lower consumer copayments), through altering providers’ behavior.

Another problem with more competition among health plans concerns access to care. Suppose there were only one plan that provided insurance to everyone. That plan would not experience unfavorable selection because it would have both the good and the bad risks. As the number of health plans increases, however, each plan fears that it may be left with the bad risks. Thus, plans may begin to compete not by providing high-quality, efficiently priced products, but instead by refusing to cover unhealthy patients or finding ways to avoid paying the bill.

More generous health benefits. Another potential problem of more competition is that it can induce insurers to try to outdo each other by offering more and more different kinds of benefits. This makes it more difficult for prospective purchasers to compare alternatives. Thus, consumers may pay more in premiums than they would otherwise.

An example of this type is found with health insurance for supplementing Medicare coverage—so-called Medigap policies. Since its inception soon after Medicare’s passage in 1965, the Medigap market has been plagued by problems ranging from agent abuses to poor policy payouts. In 1980 Congress passed legislation that required Medigap policies to meet minimum benefit standards. But problems persisted, in part because each company sold policies with different benefits, almost all of which exceeded the minimum standards. Thus, comparison shopping was still difficult and was aggravated by the existence of so many companies.

This problem is illustrated in a recent study of Medigap policy benefits
durigg 1990, which examined Medigap policies offered by twenty-three of the largest companies in the market. Each of the nine companies that offered to pay some of the costs of prescription drugs had a different set of benefits. Annual deductibles for drugs ranged from $50 to $250; coinsurance, rates ranged from 20 percent to 50 percent; and the annual company liability ranged from $300 to an unlimited amount.

The tremendous variation in policy benefits, by itself, does not indicate a problem with market competition. Coupled with poor information, however—and the Medigap market is notorious in this regard—there is reason to suspect a problem. This is supported by the fact that in spite of regulations in place for almost ten years to prevent Medigap policies from returning less than 60 percent of premiums in health benefits, the U.S. General Accounting Office (GAO) reports that over one-third of commercial insurers in the Medigap market had loss ratios that fell below this standard. This poor performance recently led Congress to limit companies to selling only ten standardized sets of benefits.

More physicians. The third example in which increased competition could be harmful is through increasing the number of physicians. There are two potential problems: Aggregate costs could increase, and quality could decrease.

The cost argument is the more familiar one. Normally in a competitive market, an increase in the number of suppliers will lower prices and increase efficiency. This does not appear to be the case in the physician market, for two reasons. First, patients and their families are often insensitive to price because they possess health insurance, which lowers the out-of-pocket cost of seeking treatment. Second, physicians recommend what services their patients receive. If physicians act to protect their incomes in the wake of more competition—and most evidence indicates that they do—then increasing physician supply will result in higher health care costs.

Another possible problem with rising physician supply concerns the quality of care. Under the competitive model, as the number of physicians increases, the volume of services provided by any particular physician will fall. Some recent studies have shown that the quality of physician care, particularly for technically exacting procedures, is affected by the number of times a physician provides a particular service. In one recent example from New York State, researchers studied the relationship between hospital mortality and surgeons' volume for coronary artery bypass surgery. The researchers found that patients of surgeons with low volumes had mortality rates 2.4 to 4.2 times higher than those who had surgeons with the highest volumes. Studies that have analyzed a range of services are generally supportive of these results.

Physician investment in referral facilities. A similar problem with
additional competition concerns the issue of physician investment in referral facilities. Increasingly, physicians are purchasing laboratories, ambulatory surgical centers, or other health facilities. A recent study illustrates the problems that can be caused by this form of competition.\textsuperscript{17} Researchers examined physician ordering patterns for six imaging procedures. They found that physicians who self-referred (that is, performed procedures in their offices) ordered more than four times as many of these procedures per patient as did those who referred patients to radiologists. Self-referring physicians also charged more per procedure than the radiologists/laboratories that received referrals charged. Putting quantity and price together, total expenditures on imaging ranged from 4.4 to 7.5 times higher for self-referring than referring physicians.

Why does allowing physicians to compete by investing in referral facilities appear to increase health care costs? Most likely, when physicians have a financial self-interest in a referral facility, they are more likely to recommend tests or treatment as a means of increasing their incomes. Although this might not necessarily be in patients’ best interest, patients do not normally have the expertise to question physicians’ recommendations for tests (indeed, they often insist on them). The referral facilities may also be located in the same building in which the physician practices, and the services are often fully covered by health insurance.

**More technology and amenities.** Hospitals compete with each other for physicians and for patients based, in large part, on factors other than price. Two examples of this are the technologies that are available and the amenities offered. In a competitive market this sort of competition is desirable because it offers consumers the greatest choice of alternatives. In a less competitive environment, however, it could lead to the proliferation of technologies that provide diminishing incremental benefits, and the provision of amenities that significantly raise health care costs.

Because consumers pay so little of their hospital bills out of pocket, they have almost no incentive to choose a hospital that charges lower prices. Recognizing this, hospitals often market themselves to physicians and to patients based on the types of services, technologies, and amenities they offer. For physicians, these could range from the availability of facilities to perform specialty-specific procedures, from organ transplants to laser surgery, to availability of operating rooms at convenient times, to such mundane amenities as free parking. For patients, the list might include the availability of specialized outpatient services such as a headache clinic, or inpatient services such as cardiac bypass surgery or epidural anesthesia for labor and delivery, or gourmet meals.

One study found that hospitals in more competitive areas were more costly than those facing less competition, due in part to this style of
Average costs per admission were 26 percent higher in competitive areas than in areas where hospitals faced no competition. This occurred partly because hospitals competed by spending resources to make themselves as attractive as possible to physicians and patients, irrespective of costs.

**The Potential Of Managed Competition**

Most analysts would probably agree that allowing unfettered competition to reign in the health care sector would be unwise. Advocates believe that managed competition would overcome the problems of a purely competitive health care market yet still provide strong incentives to consumers, health plans, and providers to use resources efficiently. Using the examples presented earlier, we next examine the extent to which managed competition is likely to fulfill its promises.

**Competition among health care plans.** We believe that managed competition has the potential to partly, but not fully, correct the problems of additional competition among health plans.

The first problem of whether plans will have sufficient market power in their dealings with providers depends to a large degree on the rules of managed competition. If providers are free to become members of as many health plans as they like, and if many health plans are allowed to compete in an area, then managed competition may not provide plans with enough clout. Providers—both hospitals and physicians—could still contract with several conventional insurance plans, several PPOs, and several individual practice associations (IPAs). The only way to alleviate this problem would be to limit severely the number of plans available or the number with which a provider could be affiliated.

There is a common misperception that the existence of health insurance purchasing cooperatives (HIPCs), which would act as the broker for individuals and small employers in their dealings with health plans, would solve this problem. It would not. If health plans do not have sufficient bargaining power with providers, then many of the plans from which the HIPC can choose might have difficulty controlling their costs. Under such a scenario, large group- or staff-model health maintenance organizations (HMOs)—which instill cost-conscious behavior among their providers—might be able to offer coverage at a lower price. Nevertheless, we do not know the degree to which consumers would choose these networks under managed competition, nor the degree to which such plans would control future inflation rates. Consumers may choose instead to supplement their employer’s contribution (with after-tax dollars) to purchase a plan that includes their own physician or that offers freedom of choice or greater access.
to technologies and amenities.

The second issue concerns whether plans will be forced to compete on the basis of efficiency, rather than by choosing the healthiest patients. This is an area in which managed competition is likely to be successful—with a caveat. Under most proposals, plans have no say over who their enrollees are. There is an open enrollment period in which anyone can join any plan; everyone in a particular family category (for instance, individuals, couples, those with children) would be charged the same amount; and coverage restrictions such as preexisting condition clauses would be prohibited. Finally, because the premiums paid to plans would be risk-adjusted, plans would be paid more if they ended up with a poor selection of enrollees. These rules are likely to do much to force plans to compete on the basis of quality and cost rather than risk selection.

There is one important caveat, however: Plans could still do what they could to get their most costly subscribers to disenroll. There is, unfortunately, little evidence available concerning the extent to which health plans behave like this, although there is nearly universal agreement that sicker enrollees are more likely to disenroll from HMOs. Under managed competition this sort of behavior would be monitored but, as Joseph Newhouse states, might be difficult to control. One thing that might help is for plans to report the use and cost experience of disenrollees; this could be made public, alerting consumers that certain plans have a tendency to “dump” sick patients. Perhaps a more effective way to keep plans from acting in this manner is to adjust payment levels to account for the expected costs associated with sicker enrollees and disenrollees. It is not clear, however, whether such a formula could ever be so finely tuned to negate the incentive for plans to behave in such a fashion.

The final issue concerning competition among plans is whether plans will compete by each offering varying benefit packages, making it difficult for consumers to make an “apples and apples” comparison of alternative plans. Managed competition proposals require that plans provide minimum benefits but typically do not set any limits on the extra benefits they offer. Managed competition could then suffer from the same problem that plagued the Medigap market. Although the problem could be a serious one, there are two reasons to believe that it will not become quite as extensive as it did with Medigap.

First, the purchase of Medigap policies is heavily subsidized. One of the cornerstones of managed competition is that people will have to bear the full costs of any policies they choose that cost more than the cheapest plan in an area. Second, one of the reasons that Medigap policies are so complicated is that they are keyed into Medicare’s benefit structure, which in itself is extremely complicated. In general, the benefits provided by employer-
sponsored health insurance policies are more straightforward; they are not contingent on the often arcane coverage rules of Medicare.

“In spite of these points, it is easy to imagine consumers having difficulty making accurate comparisons of the cost-effectiveness of alternative health plan, choices under managed competition. One possible remedy would be to require that all plans offer and price separately coverage that provides only the minimum benefits and, if they choose to do so, some standardized riders. That way, consumers could compare the cost of more comprehensive benefits across different plans.

**Competition among health care providers.** In our earlier discussion on additional competition among health care providers, we identified three central problems. First, an increase in physician supply could increase costs if physicians succeeded in protecting their incomes by providing more (or more costly) services. Second, cost control might be more difficult if physicians continued to invest in office-based testing and in referral facilities. Third, more competition could raise costs if hospitals competed with each other by obtaining expensive technologies and offering costly amenities.

Beginning with the issue of more physicians, the relevant question is whether managed competition would mitigate or even reverse previous trends in which more physicians resulted in higher per capita health care spending. Under most managed competition proposals, tax-deductible employer contributions to employee health care coverage would be the same for all plans and would be limited to the cost of the lowest-cost plan in an area. Health plans would be forced to price their benefits competitively. If, subsequently, they could not control spending, they would lose money. Under such a scenario a case can be made that with a glut of physicians to choose from, plans will be able to obtain services at lower prices.

Over time, however, the presence of more physicians could also spur the development of more new services, even if they were paid for in after-tax dollars. If these services were in great demand, physicians’ bargaining power with health plans might then be unaffected under managed competition, regardless of whether these additional services were covered by the health plans. High-technology diagnostic or therapeutic services not covered within the base plan (such as in vitro fertilization for couples with reproductive problems, naturopathic treatment, or acupuncture) might all fit in this category. Alternatively, technologies could be covered by the base plan, except for specific indications not considered necessary or appropriate, such as a computed tomography (CT) scan for a patient with migraine headaches. Additionally, demand for cosmetic and other “feel-good” services could increase because of greater physician supply.

The bargaining power of physicians in their dealings with plans will be affected by the relative ease in which physicians can become part of an
approved plan or establish a practice outside the health plan because of reputation, effective marketing, or a strong referral base. Whether as a supplement to the base plan or purchased directly by the consumer, all of these services will be obtained disproportionately by those with relatively high disposable incomes. A so-called two-tier system is likely to result. Although some policy analysts may recommend that these extra services be prohibited, Americans are unlikely to accept such an edict.

In contrast, managed competition should be fairly effective in controlling costs associated with physician investment in (and subsequent use of) referral facilities. If there is an adequate number of physicians in all specialties in an area, then managed competition could mitigate the inflationary effects of physician investment in testing and referral services, for several reasons. First, physicians, especially those who focus on primary care, could be put at financial risk by health plans for all ambulatory services, including testing. In this event physicians would have strong incentives to limit testing rates and costs, even if they had a financial interest in a referral facility. Second, as a requirement of being a member of the provider panel, health plans could prohibit physician in-house investment in referral facilities. Third, health plan contracts might require full disclosure, and the plans could implement a system of close monitoring of testing and referrals, comparing physicians with and without in-house facilities or investments in facilities. Finally, the plans could require that all testing be performed by specified laboratory and x-ray facilities, selecting those facilities without physician investors.

Finally, with respect to hospital spending on new technologies and amenities, we have argued above that the high level of interest in new technologies on the part of American consumers will not greatly diminish under managed competition. Technology and amenities therefore are likely to remain forms of competition under any managed competition proposal, largely because they can strongly influence consumers’ choice of plan. It is true that plans are likely to establish explicit criteria to evaluate and prioritize plan needs for existing and new technologies. Incremental improvements in technology, such as faster or less claustrophobic magnetic resonance imaging (MRI) facilities or ultrasound with better resolution, will be carefully analyzed for potential contribution to improved plan efficiency and outcomes of care.

Plans will have more difficulty, however, resisting breakthrough technologies with potentially broad applications. For example, a new, precise test for colon cancer at earlier, more curative stages would be quickly added, as would a new drug that reversed or even slowed loss of mental capacity in Alzheimer’s disease (assuming some pharmaceutical coverage as part of the core benefit) or a vaccine that prevented progression of human immunode-
ficiency virus (HIV) infection to acquired immunodeficiency syndrome (AIDS).

If the pace of technological investment remains high in the United States, consumers will want all of its fruits. What is likely to change is that there will be some financial risk that limits use of new technologies to situations with a significant likelihood of substantial clinical benefit. Each specialty will compete against all others to get new technology introduced into covered plan services.

Two effects are likely. Whatever body determines the tax-deductibility cap for the basic health plan will be under strong, continued pressure to increase it at a faster rate than inflation. Plans will argue that they cannot provide the highest-quality medical care within the constraint of a budget that ‘is supposed to rise at the overall rate of inflation. They will further argue that more rapid increases in contributions to the base plan are necessary to prevent the growth of a two-tier system, where subsidized public patients end up choosing less costly plans that do not include the new: technologies. In addition, however, approved plans will be forced by competitive pressures to offer supplemental benefits above the base plan benefit level (funded with after-tax premium dollars). These supplements above the base plan will pay primarily for improved access to technology and amenities such as semiprivate or private rooms, specialty duty nurses, physician house calls, and so forth. If consumers still believe that access to the best technology is missing from the minimum benefit package, those with sufficient disposable income will purchase plans that provide additional benefits; those without the income will not.

Conclusion

Managed competition has the potential to increase systemwide efficiency—that is, to result in the most output from the fewest inputs. Whether it can also slow health care inflation is more difficult to judge, but it is a widely held expectation. During the economic summit in December 1992, President-elect Bill Clinton stated that the current health insurance system “is a joke—it’s going to bankrupt this country.” Since Clinton also called for health system reform based on managed competition, there is an implied expectation that managed competition will be judged based on this dimension.

If a national objective is to contain aggregate health expenditures, our analysis indicates that managed competition may have to be supplemented with other types of controls. Some of these controls, however, may be difficult to sell to advocates of managed competition or to the American public. To ensure that consumers can compare alternative health plans to
make a reasonable choice, plans may have to conform to more than minimum benefit requirements. As in the Medigap market, it may be necessary for plans to sell only standardized benefits. For plans to have sufficient leverage in their dealings with providers, it may be necessary to control the number of plans with which providers have contracts.

More difficult to answer is the question of whether limiting tax-advantaged health care spending under managed competition will be a significant brake on aggregate expenditures. A fundamental policy question is whether the national objective should be to reduce the rate of increase of all health care expenditures or only those that are tax advantaged. Meeting the former objective could require limiting how much people can pay for plan premiums or prohibiting plans from offering services above a certain dollar or coverage level. One alternative would be to permit out-of-pocket spending for any additional health care services but not permit such services to be reimbursed through approved health plans. Today, the American public is likely to reject any effort to explicitly limit what individuals can buy.

Mechanisms used by most industrialized countries that have controlled aggregate health spending include some limits on supply, such as controlling the number of physicians or their specialty distribution. Many also have some controls on capital. Promoting competition at the level of the health plan has the advantage that traditional competitive factors can substitute for regulatory processes to allocate new technologies. However, if competition among plans based on technology experts strong pressure to expand the envelope of tax deductibility or leads to rapid expansions in after-tax purchases of health care services, calls will be heard for new mechanisms to regulate technologies and their diffusion. And, if capital purchasing and diffusion decisions were made regionally (as in Canada), it is not clear how capital could be allocated among different health plans without undercutting some of the tenets of managed competition.

What is troubling about this scenario is that the addition of each control makes it increasingly difficult to understand how the health care marketplace is likely to function. It will resemble neither the model espoused by proponents of managed competition nor the models advocated by proponents of more government controls. History provides the clear lesson that all regulation has unintended effects. The more controls put in place, whether as preconditions to managed competition or complementary to it, the more suspect will be the predictions of managed competition’s benefits, limitations, and net effects. This lack of predictability assures low future unemployment rates for health services researchers—and a distinctly American cast to the health system reform suspense novel.
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NOTES

2. An externality exists if the act of producing and consuming results in any benefits or costs to others.
5. Interestingly, two geographic areas that are often cited as being particularly successful in controlling health care costs—Hawaii and Rochester, New York—are both characterized by having few competing health plans. Hawaii has only two major private health insurance plans (Blue Shield and Kaiser), while Rochester is dominated by Blue Cross/Blue Shield, along with a few HMOs.
6. It is difficult if not impossible to predict where the threshold occurs—that is, what is the optimal number of health plans in an area. It depends, among other things, on such factors as the degree to which providers set their prices independently of each other and the sophistication of managed care plans and the population as a whole.


16. For example, in one study the authors found the relationship to hold for six of ten procedures. R.G. Hughes, S.S. Hunt, and H.S. Luft, “Effect of Surgeon Volume and Hospital Volume and Quality of Care in Hospitals,” *Medical Care* (June 1987): 489-503. One study that did not detect such a relationship was J.V. Kelly and F.J. Hellinger, “Physician and Hospital Factors Associated with Mortality of Surgical Patients,” *Medical Care* (September 1986): 785-800.


19. Studies have shown that inflation rates in HMOs are similar to those experienced by fee-for-service medicine. See, for example, J.P. Newhouse et al., *Are Fee-for-Service Costs Increasing Faster than HMO Costs?* RAND Report no. N-2364-HHS (Santa Monica, Calif.: RAND, October 1985).


22. An exception to this is the proposal offered by John Garamendi, insurance commissioner of California. Under his proposal the most expensive plan in a region can charge premiums no more than 50 percent above the lowest-cost plan in that area.

23. This is because Medicare shares in paying the cost of the extra services generated by ownership of these policies. For example, if owning a policy induces a person to use one extra physician service during a year, Medicare pays 80 percent of the cost of that service, while the insurance company pays just 20 percent.