Envisioning a Free Market in Health Care

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Although President Obama and the Democratic Congress were able to pass landmark health legislation, their efforts to reform health care ran into predictable political roadblocks. In a severe recession, taxing business and labor is obviously not helpful to economic recovery. Moreover, an array of overreaching sales pitches—claims of additional coverage without additional costs or rationing—piqued the cynicism of the general public. Given historical spending and budget deficits, an expensive new federal program is difficult to swallow. Mandates and restrictions on health insurance can only exacerbate the problem of rapidly rising health care costs (Tanner 2010).

Perhaps most important, although many people express dismay with the health care system, they are generally content with their own health care and health insurance. They might be willing to help others get care or insurance, but become quite concerned if reform might include a dramatic change in their own status.

Need for Real Reform

One can speculate whether "Obamacare" will persist, particularly in light of recent constitutional challenges to the individual mandate, or whether economic and political markets will adjust significantly.

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The legislation imposes a burden on those with private insurance and will lead to higher costs for many taxpayers. Moreover, a sluggish economy—made more sluggish by Obamacare—will limit government spending initiatives, especially at the state and local levels. Given the current state of America's health care system, with extensive third-party payment and favorable tax treatment, there is need for real reform.

Santerre (2007) provides a "health misery index" from 1940–2006 that indicates the sum of "excess" medical inflation (above increases in the CPI) and estimates of the percentage of those without health insurance. The index declined consistently from 1940 to 1975: excess medical inflation was low and relatively stable, while the proportion of uninsured Americans decreased in all except two years—from 90.7 percent to 12.6 percent. The spread of private insurance was responsible for most of this decline prior to the creation of Medicaid and Medicare in 1964, when the proportion of uninsured was 27.9 percent. Since then, the spread of public insurance has been the most significant factor in decreasing the percentage of uninsured. Santerre's index bottomed out in 1980 at 13.1 before trending slightly upward to a high of 16.6 in 2006 (see Cutler and Gelber 2009).

Table 1 presents measures of excess medical inflation in medical care, physician services, dental services, and prescriptions. There was medical *de*flation until the growth of subsidized private insurance in the 1950s.

Such measures are admittedly simplistic, but they point to a few realities. First, it would be useful to have objective measures of

TABLE 1
Excess Medical Inflation
(Percentage Increase above CPI)

	Medical Care	Physicians	Dentists	Prescriptions
1935–1951	-1.1	-1.7	-1.1	-1.6
1952–1971	2.6	1.9	1.1	-2.0
1972–1981	0.7	0.3	-0.9	-2.9
1982–1992	3.9	3.1	2.8	5.3
1993–2008	1.8	0.7	2.1	0.9

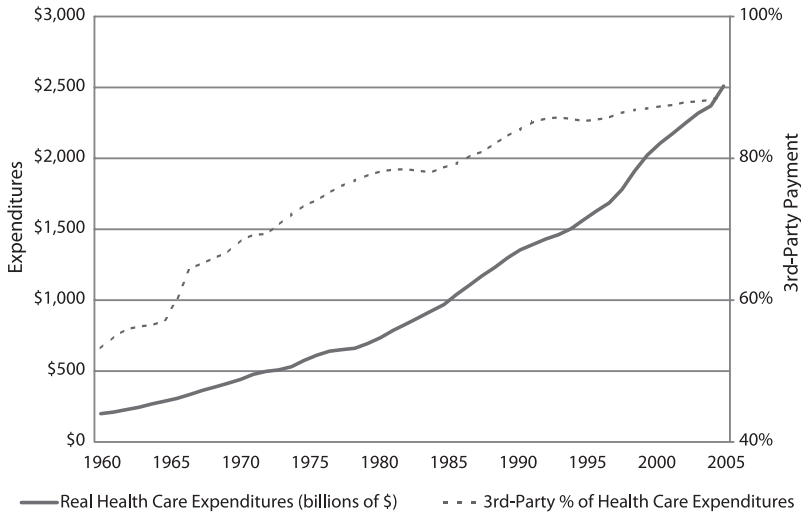
Source: Bureau of Labor Statistics.

health, health insurance, and health care. But such measures are difficult to find and subject to abuse. Second, there is causation between the short-run benefits and long-run costs of government involvement. Figure 1 illustrates that health care expenditures have risen steadily as third-party payments—through low-cost government health insurance as well as through employer-provided coverage exempt from taxes—have increased.

The status quo is suboptimal with respect to (1) access to health care and health insurance, (2) affordability to individuals and cost to taxpayers, (3) the unfortunate connection of health insurance to employment, and thus the problem of portability (Adams 2004), and (4) inequities in the available subsidies. If the status quo is unacceptable, then two basic choices remain: increase government involvement in health care or let the free market operate.

If one wants to increase the role of government, then to what extent and at what level? For example, should government operate health care facilities and set pay rates for doctors or empower poor people with the resources to acquire privately produced health services? Should government involvement be extended at the

FIGURE 1
Real Health Care Expenditures and 3rd-party Payments



federal, state, or local levels? Given the observed challenges of implementing similar reforms at the state level—for example, in Massachusetts and Tennessee—why would one be optimistic about expanding the role of the federal government?

Government has become increasingly active in regulating and financing health care over the last 40 years—increasing health care spending from 25 percent to more than 50 percent of overall spending. This increased intervention has led to higher, not lower, health care costs. Moreover, the direct costs of past expansions of government intervention in health care have been grossly underestimated. For example, the Joint Economic Committee (2009) notes that the initial 1965 estimate of 1990 Medicare expenses was $12 billion when actual spending turned out to be $110 billion.

The tendency to underestimate the costs of government intervention introduces a serious problem for advocates of more government control of health care. Why would anyone trust the government to run a new health care program when it has already wasted so much money? Can anyone believe President Obama when he claims that his reform will save $500 billion in Medicare spending? More likely, we will experience higher costs, reduced services, longer waits, and lower quality.

Government intervention in health care has increased under both major political parties over the last 45 years. As we will see, there are compelling stories that increased intervention has caused more and more trouble in the provision of health care. In any case, the government has clearly failed to control costs. Its hypothesized success at doing so in the future—aside from imposing significant rationing—is an article of blind faith.

So, what would it look like to have *less* government involvement in health care? Freer markets would mean far less subsidization and regulation of the transactions between insurers, providers, and consumers. The result would be more competition, more choice, and lower costs. This article covers a litany of policy reforms that would unleash the market from burdensome and costly regulation, and discusses best practices in the private sector. The key questions addressed are: How would a free-market system improve affordability, access, and quality? How would the market deal with vital issues like portability and pre-existing conditions? And how would the market improve incentives and outcomes?

Ending the Subsidy for Employer-Provided Health Insurance

In moving toward a free market in health care, the most important first step would be to end, or at least reduce, the subsidy for health insurance obtained by workers through their employers. Allowing employers to use pre-tax dollars to buy health insurance lowers the net price of coverage and thus increases the amount of coverage demanded by workers who do not have to pay taxes on their health benefits.

Ironically, the subsidy is itself the product of unforeseen consequences from earlier government intervention—namely, caps on wages during World War II. Unable to pay higher wages, firms shifted to fringe benefits as a form of higher compensation, including health insurance.[1] The subsidy is inequitable because it is unavailable to the self-employed , unemployed workers do not receive it, and those subject to higher marginal tax rates benefit the most. Moreover, by treating health insurance benefits as a "tax preference" item, the Treasury loses substantial revenue (Joint Committee on Taxation 2009).

The ideal, revenue-neutral solution would be to remove the distortionary subsidy for all workers and lower income or payroll taxes by the same amount. A second-best option would be to extend the same subsidy to all individuals and to separate it from employment.[2] But the question then becomes, how much insurance should be subsidized? If the current subsidy is extended to all individuals, that arrangement would dramatically increase existing distortions. Although more equitable, it would be even less efficient and would presumably cause even more trouble

[1]A vague, bureaucratic ruling within the IRS in 1943 was interpreted to allow fringe benefits to be tax free. The ruling was clarified and codified by the Internal Revenue Code in 1954 (Thomasson 2002). Prior to that decision, Thomasson (2003) points to "the Baylor plan" as the precursor to the development of Blue Cross/Blue Shield as a vital innovation in the provision and popularization of low-cost health insurance. In 1929, a group of teachers in Dallas "contracted with Baylor University Hospital to provide 21 days of hospitalization for a fixed $6.00 payment."

[2]If insurance is not separated from employment, next-best reforms would include allowing employers to (1) contribute to 401(k)-like accounts for health expenses; (2) offer higher wages instead of health insurance to some employees (e.g., those who already have coverage through a spouse's insurance); and (3) negotiate health insurance benefits for retirees.

with access and affordability. One option would be to reduce or eliminate the subsidy for the wealthy, but that would only limit the damage done by such subsidies.

Given the political constraints and economic realities, the practical option may be to simply extend the existing subsidy for health insurance to everyone—but only at a level to provide catastrophic insurance for substantial and unpredictable medical expenses. A variation on this theme would be to provide the subsidy on a means-tested basis, reducing it for those with higher incomes.

Emanuel and Fuchs (2005) propose a voucher system to accomplish something like this. The system would be universal (eventually extending even to Medicare recipients), allow freedom to choose insurance plans and purchase more insurance and services with post-tax dollars, eliminate Medicaid and employer-provided insurance, and rely on a private delivery system.

Would firms continue to provide health insurance as a part of compensation? Perhaps. Workers would no longer have a tax incentive to get their insurance through their employer. But the inertia of tradition, along with the presence of search costs, would still provide some impetus for employers to present workers with a menu of options. Moreover, the firm might still enjoy economies of scale—if subsets of employees could coalesce around a few types of insurance.[3]

In any case, with the removal of the subsidy for health care above catastrophic coverage, the incentive to obtain so much insurance would diminish. Thus, many people would reduce coverage to that level. Insurance companies could help individuals with catastrophic risk management—their traditional function. Firms could get out of the business of managing, rationing, and buying health care. We would delink insurance from employment, ending the portability problem and dramatically reducing the brouhaha over pre-existing conditions. Individuals would have better incentives and more control. More broadly, we need to move away from third-party payment and toward two-party transactions in health care. The current system leads to a plethora of prisoners' dilemmas—where it is in the best interest of society to have one outcome, while it is

[3]Under the current arrangements, Cochrane (1995: 458) makes the interesting observation that pooling from economies of scale would indicate that individuals could pool naturally. Since they don't, we can infer that pooling "must be formed on characteristics unrelated to health status."

any given individual's interest (whether patient, doctor, hospital, insurer, or employer) to do something different.

Under the current system, insurance companies are too often in an antagonistic relationship with doctors and hospitals; the third-party payer is often not on the same side as the providers. And all of this battling takes place around the person with, ironically and perversely, the least input in the process—the consumer (Goodman and Musgrave 1994).

In contrast, as Herzlinger (2004a) advocates, society would be far better off with a "consumer-driven system," analogous to a "consumer-driven" retirement system through 401ks rather than Social Security. It would put more decisions in the hands of consumers, increase choice and competition, provide incentives for providers to supply price information and for consumers to pay attention to costs, and eliminate portability problems.

Likewise, Laffer (2009) notes that the "wedge" in health care between the marginal cost of providing extra care and the much lower price consumers pay out of pocket has grown over time. During the last 40 years or so, out-of-pocket spending for health care has fallen from 50 percent to 10 percent. The proportion picked up by private insurance increased from 25 percent to 40 percent, while the proportion picked up by Medicare and Medicaid (i.e., by taxpayers) increased from 25 percent to 50 percent. Going forward, decreasing this "wedge" would substantially improve outcomes.

Pre-Existing Conditions and Time-Consistent Health Insurance

If reducing and revising the current health insurance subsidy is the most important first step toward real reform, then dealing with pre-existing conditions and changes in "health care status" is a close second. That's why the work of University of Chicago economist John Cochrane is so vital.

Cochrane (1995, 2009a, 2009b) describes a model of insurance for health care costs combined with additional insurance against "health status changes." Medical insurance covers medical expenses in a given time period (minus deductibles and co-payments). "Health-status" insurance would cover the risk that one's health status deteriorates in the current period—and thus, that future medical insurance premiums will increase. If one moves into a more

expensive medical insurance premium category, then health-status insurance would pay out a lump sum that is sufficient to cover all future higher medical insurance premiums (with no change in out-of-pocket expenses). If you contracted a chronic or serious illness but had the lump sum to pay higher premiums, you could always pay for new insurance without an additional financial burden. More important, insurers would then compete for sick people too.

The root issue here is the inability of *each* side to credibly commit to an on-going relationship, especially as more information is revealed over time—in particular, a "health status change" that will *ex post* become a "pre-existing condition." Conventional long-term contracts are ineffective for insuring long-term health risks, but they can be replaced by a series of time-consistent short-term contracts (Malcomson and Spinnewyn 1988; Fudenberg, Holmstrom, and Milgrom 1990; Rey and Salanie 1990; Diamond 1992).

Perhaps ironically, the larger commitment problem is on the side of consumers. Insurance providers can be forced by law to continue an insurance relationship, but individuals cannot be compelled to continue that relationship. Both sides of the coin create problems if health status changes. If one's health status gets worse, the insurer will want to charge higher rates or get out of the relationship. But if the insurer is forced to commit, and one's health status improves, another insurer will able to lure the customer away with lower rates (see Hendel and Lizzeri 2000, Cardon and Hendel 2001, Crocker and Moran 2003).

Cochrane (2009a) deals with a number of potential challenges to implementing his reform. First, insurers would need to calculate the expected present value of the higher costs of a health-status change, but that problem is not significantly different from what is done now. In fact, Herring and Pauly (2006) use data on the incidence of a long list of chronic diseases to provide a realistic estimate of the sum of medical and health-status insurance premiums.

Second, in order to prevent the misuse of the lump-sum payments, Cochrane (2009a) recommends that the sum be placed in a custodial account (similar to a Health Savings Account). This allows for a modest degree of paternalism which is much more politically palatable if not more efficient.

Third, Cochrane (2009a) argues that insurers would honor such contracts to protect their reputation; market discipline would

ensure that inefficient insurers fail; and courts would enforce contracts. Loss reserves and capital requirements would make insurers prudent and help take care of concerns about portability. Moreover, contracts could specify that insurers pay the lump sum if there is a change in a policyholder's health status or employment, so that portability would be ensured with no change in premiums.

Fourth, Cochrane (2009a) acknowledges a transition problem—namely, dealing with those who already have pre-existing conditions. In such cases, the government could subsidize the initial accounts, which would be inefficient but not expensive, and equitable enough to be politically palatable.

So, how do we get from here to there? Cochrane (2009a) notes the impediments caused by subsidies and regulatory barriers. But as he observes, it is encouraging to see the individual health insurance market already moving in the direction of health-status insurance, even in the current environment.

Pauly and Herring (1999) determined that three-fourths of private medical insurance policies were guaranteed renewable even before this was mandated in 1996. Moreover, Herring and Pauly (2006) find evidence that individual health insurance premiums are beginning to reflect an "incentive-compatible" structure which combines medical and health-status insurance premiums.

Cochrane (2009a) also points to a product offered by UnitedHealth Group, one of the nation's largest health insurers. With it, customers have the right to buy medical insurance in the future, with future premiums based on the customer's current health status (even if their health worsens in the interim).

To fully implement Cochrane's proposal would require

> a thoughtful deregulation of insurance markets, starting with an end to the strong tax and regulatory preference for employer provided group coverage. It does not need a new layer of regulation. The small individual insurance market is already starting to feel its way toward health-status insurance. The deregulatory path will allow this effort to blossom fully [Cochrane 2009a: 2].

In a competitive market, health insurers charge higher premiums to sicker people and lower premiums to healthier people. The only other pooling system that can cover long-term insurance is

mandated nationalized health care. But that arrangement, unlike a market-based system, would have no competition, flexibility, or product variety—and it would lead to serious problems with quality and rationing.

Health Savings Accounts

Zycher (2009) describes HSAs as "financial instruments linked to high-deductible health insurance plans," allowing households to "set aside tax-free funds for routine medical expenses." He notes that there are more than six million HSAs and they are growing more quickly than individual retirement accounts (IRAs) grew in their first few years.

Goodman and Musgrave (1994) promoted HSAs in their seminal book *Patient Power: The Free-Enterprise Alternative to Clinton's Health Plan*. The reform took hold, ironically, with the passage of the Medicare Prescription Drug Improvement and Modernization Act of 2003, itself a significant increase in government's intervention in health care. HSAs have been quite helpful in edging us toward a market-based health care system, especially in helping some people imagine a world with limited third-party coverage and dramatically increased individual responsibility.

If HSAs are to continue playing a useful role, additional reforms would be helpful—namely, eliminate payroll taxes on HSA contributions, allow HSAs to be used to pay insurance premiums, and allow contributions to HSAs after age 65.

Insurance Regulation

Another important area for reform would be three sets of policy proposals that would dramatically reduce insurance regulation.

First, insurers are often prevented from competing with each other across state lines. Insurance from out-of-state providers was greatly reduced by the McCarran-Ferguson Act of 1945. The Act followed a 1944 Supreme Court ruling that insurance was classified as "interstate commerce" and could be regulated by federal antitrust laws. The Act gave antitrust exemptions to the insurance industry and implicitly codified state insurance regulations into federal policy. These restrictions need to be eliminated to promote competition, increase choice, and reduce costs.

Second, in the current environment, it is very difficult to offer insurance services across state lines because of insurance mandates that increase the number of services covered by insurance. This requirement results in higher costs, less flexibility for consumers, and less ability for insurers to compete. A free-market system would allow people and insurers to make mutually beneficial arrangements on what insurance would cover.

All 50 states require insurers to either offer or include certain benefits in the insurance policies they offer (Bunce and Wieske 2009). Some states, for example, require an insurer to include benefits for the treatment of alcoholism or treatment by a chiropractor, regardless of whether any given person wants those features (Graham 2008b). More broadly, insurance companies are not allowed to specialize in insurance for specific ailments (e.g., diabetes or cancer).

As a result of these mandates, one finds significant levels of market concentration in the insurance industry within the states. In 38 states, the largest firm serves more than one-third of the market and in 16 states more than half. In 47 states, the largest three firms serve more than half of the market and in 36 states more than 65 percent (Robinson 2004). In 2008, the market share of the five largest insurers was at least 75 percent in every state (Emmons, Guardado, and Kane 2008).[4]

Third, states commonly mandate coverage for certain groups of people, again resulting in higher costs and cross-subsidies from the healthy to the unhealthy, and from those who plan well for their futures to those who do not. These restrictions come in a variety of forms. There are "guaranteed issue" mandates that require all insurers to make insurance available to all applicants regardless of a change in health status. There are also "guaranteed renewal" mandates that require insurers to renew insurance policies when the policy expires, and mandates to require insurers to cover

[4]Conover and Miller (2010: 33) argue that "the health insurance market is highly competitive for the 61 percent of privately insured Americans who now purchase their insurance through large groups." States with a "dominant insurer" tend to be dominated by a nonprofit insurer and do not consistently produce "significant adverse consequences." They conclude that "a more plausible view [is] that concentration in the health insurance industry has provided a useful corrective to the more disturbing growth in concentration of hospital and physician markets over the past decade."

additional persons—for example, children up to 25 years of age (King 2009).

In addition, a number of states have substituted "community rating" for "risk rating" (Sloan and Conover 1998). "Strict" community rating requires an insurer to charge each insured individual the same premium regardless of age, sex, health status, claims experience, or other risk factors. "Modified" community rating allows an insurer to vary the premium based on age or another of these factors, but not health status.

Bunce and Wieske (2009) find 2,113 state mandates nationwide on services and providers. Those mandates are costly to insurers who respond by increasing premiums or leaving the market, thus reducing competition and driving up prices. Evidence of this is seen in the remarkable cost differences between similar policies in different states. For example, in 2005, the average individual paid $4,044 in New Jersey and $3,996 in New York for health insurance, but only $1,188 in Iowa and Wyoming (Matthews 2005). More recently, minimum coverage for a family of four cost $145 in Iowa versus $906 in Massachusetts (Armey 2009). A healthy 25-year-old male could purchase a policy for $960 a year in Kentucky but would pay about $5,880 in New Jersey. An average family in Texas paid $5,501 a year for coverage in 2006–2007, whereas an average family in New Jersey paid $10,398 (Bond 2009).

Parente and Bragdon (2009) report that the proportion of individual plans in New York decreased from 4.7 percent to 0.2 percent from 1994 to 2007, while the national average increased from 4.5 percent to 5.5 percent. They attribute this to the guaranteed issue and community rating mandates enacted by New York.

The overall costs of such regulations are even more staggering. Conover (2004) calculates $170 billion in benefits from such regulations but $339 billion in costs, a 2:1 ratio with a net social loss of $169 billion—which costs the average family of four more than $2,200, enough to implement the free-market reforms discussed earlier. Conover (2004: 1) further estimates that regulations are "responsible for more than seven million Americans lacking health insurance or one in six of the average daily uninsured" and finds that "4,000 more Americans die every year from costs associated with health services regulation (22,000) than from lack of health insurance (18,000)."

The market remedy here is to repeal all of these mandates and allow insurers to freely set rates based on risks. One should note that some of these regulatory efforts are Band-Aids to deal with unfortunate outcomes in the current health care and health insurance systems—e.g., pre-existing conditions. As described earlier, a deregulated and unsubsidized insurance environment would take care of those problems.

Bast (2007) has two policy suggestions worth mentioning. First, he would eliminate the requirement that health insurers pay a very high proportion of their claims within a certain period of time (see Bunce 2002). Second, as a second-best solution, he argues that insurers should be allowed to offer temporary or permanent medical waivers for pre-existing conditions (see Wieske and Matthews, 2007).

Medicare, Medicaid, and the Veterans Administration

This trinity of large government programs is responsible for about $700 billion in health care spending. All three programs have had to deal with excess medical inflation. But Medicare struggles much more, given its pay-as-you-go financing, the wave of baby-boomers retiring, and longer life spans. All three programs present an excellent opportunity for reform in terms of the economics but face a challenging road politically.

Medicare

Medicare expenditures averaged $8,300 per beneficiary in 2006 (Groppe 2009) and increased to $11,743 in 2009. Total Medicare expenditures for 2009 were $509 billion (Berwick 2010). The program on its current course is not sustainable.

Calls for Medicare reform have echoed for some time (Cutler and Reber 1998), particularly through some sort of voucher system for the elderly (Aaron and Reischauer 1995, Cutler 1996, Emanuel and Fuchs 2005). Vouchers would allow Medicare enrollees to choose any health plan within a competitive market and let them keep the savings if they choose an economical plan. Larger vouchers could be given to the poor or those with pre-existing conditions, particularly as we transition to a new system.

Medicare provides health insurance to the nation's elderly and disabled, but it also infringes on the right of workers to

control their retirement savings and on the freedom of seniors to control their own health care. As such, it would be preferable to replace Medicare with a pre-funded system where workers invest Medicare-like taxes into personal accounts dedicated to their health needs in retirement. Rettenmaier and Saving (2009) advocate Health Insurance Retirement Accounts (HIRAs) with a fixed 4 percent contribution of after-tax wages, seeing no other way to get around this otherwise intractable problem. When one turns 65, the monies would be annuitized and a fixed sum would be paid into an HSA. Any monies left over at year's end would belong to the retiree.

Medicaid

This federal-state program for low-income families should be privatized or at least defederalized with a continued movement toward state control (as with welfare policy after 1996). It makes no sense for taxpayers to send money to Washington, only to have those funds sent back to their state capitals with strings attached.

In particular, the federal government should end its dollar-matching funding approach. The existing incentives are problematic in terms of expansion of the program, encouraging fraud and shifting state tax resources simply to obtain the subsidized matching money. If this approach is not terminated, the next best solution would be to encourage and enhance the waiver process, which reduces funding but allows some experimentation. There were 414 waivers approved from 1987–2008 (Graham 2008a).

Veterans Administration

The VA should also be privatized, with veterans given vouchers to purchase health insurance with the private insurer of their choice and to seek health care services from the privately run facilities of their choice.

Vital Organs

The market for vital organs is a textbook example of a persistent, government-created disequilibrium where there is a shortage of organs, given the effective price of zero. At a price of zero, the quantity demanded exceeds the quantity supplied, with the latter determined by those willing to donate their organs.

At present, according to United Network for Organ Sharing, there are more than 104,000 people waiting for a vital organ, nearly 82,000 of whom are waiting for a kidney. As of 2004, those on the kidney list waited, on average, about four years. There are ethical arguments against having markets for vital organs, but those arguments run into their own ethical dilemma. If there are not enough donors, then people will wait a longer time to get an organ and many will die.

A free market in vital organs would eliminate this shortage, saving thousands of lives and tens of billions of dollars annually, dramatically reducing our reliance on painful and costly Band-Aid solutions such as dialysis for those with kidney problems. As such, the National Organ Transplant Act of 1984 should be repealed, allowing the sale of vital organs. To address the concern that less-educated donors would be "exploited," some proponents of a free market in vital organs have proposed "guided payments" that could be directed into longer-term investments (e.g., a 401k, tuition vouchers, long-term nursing care, life insurance, and health insurance) or into charities, or paid out over a long period of time (Satel 2006).

In the absence of a free market for vital organs, there are a number of second-best solutions. Tax credits and tax deductions could be used to offset expenses and lost wages, as in Wisconsin. Similarly, the 2004 federal Organ Donation and Recovery Improvement Act provides grants to states and transplant centers to cover non-medical expenses. Government and society can continue to promote altruistic donations. The market can provide better information about organ donations and organ transplants through groups like MatchingDonors.com and LifeSharers.com. Finally, Satel (2009) discusses a "forward market" for cadavers. In this case, donors would receive a modest payment today for the right to their organs upon death, or a sizable payment to their estates if they join a donation registry and donate their organs at death.

Tort Reform

Various types of tort reform are quite popular. Politically, tort reform goes after an easy target; it is relatively easy to explain; and its theoretical impact is intuitively obvious. Tort reform would have direct and indirect effects on the cost of health care and health insurance through two mechanisms.

First, proponents of tort reform hope to reduce the prevalence and size of "unreasonable" awards. In doing so, medical malpractice insurance rates would decline, reducing the cost of health care and health insurance. According to the General Accounting Office (2003: 1), "Limited available data indicate that growth in malpractice premiums and claims payments has been slower in states that enacted tort reform laws that include certain caps on noneconomic damages." The overall impact, however, may be small. The Congressional Budget Office (2004: 6) found that limiting or capping damage awards to victims would "lower health care costs by only about 0.4–0.5 percent, and the likely effect on health insurance premiums would be comparably small." Since medical malpractice premiums are less than 0.5 percent of overall health care costs and medical malpractice claims are a mere 0.2 percent of health care costs, the impact cannot be that large (Hunter, Cassell-Stiga, and Doroshow 2009).

Second, proponents of tort reform hope to reduce "defensive medicine"—choices by doctors, at the margin, to choose additional tests to lessen the probability of (successful) litigation against them. This is almost certainly more important—and is likely, quite sizable—but unfortunately, it is difficult if not impossible to measure well. Sloan and Shadle (2009) find no significant impact on spending and choices within Medicare. Fenn, Grey, and Rickman (2007) and Baicker and Chandra (2005) find defensive medicine practiced with "imaging" services. Kessler and McClellan (2002) observe that defensive medicine declines when time spent and personal conflict is reduced for doctors. Interestingly, but not surprisingly, non-monetary costs can influence decisions as well.

The most impressive evidence comes from Kessler and McClellan (1996: 353), who find that "malpractice reforms that directly reduce provider liability pressure lead to reductions of 5–9 percent in medical expenditures without substantial effects on mortality or medical complications. We conclude that liability reforms can reduce defensive medical practices."

There are a variety of potential reforms that could be pursued at the state or federal level. State reform efforts have the advantage of allowing us to see a small-scale pilot project. Given the empirical work just cited, one would expect reforms that target defensive medicine to be more productive.

The General Accounting Office (2003: 11–12) recommends caps on awards to plaintiffs (including noneconomic, economic, and punitive damages), ending the "collateral source rule," abolishing "joint and several liability" where damages are recovered based on ability to pay rather than degree of responsibility, allowing damages to be paid in periodic installments rather than as a lump sum, limiting fees charged by plaintiffs' lawyers, imposing stricter statutes of limitations, establishing pre-trial screening panels to evaluate the merits of claims before proceeding to trial, and providing for the greater use of alternative dispute resolution systems such as arbitration panels.

More broadly, a legal system based on "loser pays" would avoid a lot of these problems. Others have recommended special "medical courts" (akin to bankruptcy and tax courts) to adjudicate claims, and the enhanced use of "protocols" within the medical profession to standardize and objectify treatment plans. In addition, Good Samaritan Laws should be in place to protect charitable efforts to render health assistance.

Legal but Heavily Regulated Drugs

FDA regulation of drugs could be eliminated or at least, greatly reduced. At present, the drug approval process is lengthy, arbitrary, costly, and arduous. The average length of time for drug approval is 8.5 years (Madden 2007), and the average cost per drug approval in 2002 was $403 million (expressed in constant 2000 dollars) (DiMasi, Hansen, and Grabowski 2003). Worse yet, from an investment standpoint, there are a variety of uncertainties about the process. All of this encourages pharmaceutical investments to be made by fewer, larger firms. None of this is helpful for consumer health, competitive markets, or entrepreneurial efforts.

Miller (1998: 24) describes the FDA as "arguably the nation's most ubiquitous regulatory agency, with regulatory authority over more than $1 trillion worth of consumer products annually." There are two root motives for FDA activity: (1) the belief that market providers will systematically take advantage of consumers and that the government should step in to regulate these outcomes; and (2) bureaucratic risk-aversion stemming from the reality that concrete failures are far more painful for them than abstract successes.

One way to compromise on the government's "nanny state" tendencies and bureaucratic conservatism would be to allow "dual tracking"—where the government continues to regulate but allows informed choice until a final decision is made (Madden 2010). A better alternative would be for the FDA to allow private certifiers to regulate these markets. The FDA could then play the role of "certifier of certifiers," rather than certifier of products (Miller 2000: 90). The FDA could allow certification, rather than treating its findings as a mandate for complete approval or disapproval. In other words, the FDA could merely provide information, instead of making a decision for those who might want to try a given drug.

Of course, there are trade-offs with this approach. Olson (2008) finds that an increase in review speed (and other liberalizations of the process) resulted in reduced drug safety. But why not let consumers make those choices? Consumers should have greater freedom to obtain drugs without doctor approval; more drugs should be moved to an over-the-counter status; and there should be free trade in prescription drugs across state and national lines. Consumers would rely on brand-name reputation, intermediaries with expertise (doctors, pharmacists, and independent observers), and the tort system.

In fact, we see this already in the "off-label" use of drugs—that is, the use of FDA-approved drugs for purposes other than those directly approved by the FDA. Such applications are quite common, and sometimes the majority of even "gold-standard" treatment (Tabarrok 2000). This is not surprising, given the speed of medical knowledge growth relative to the speed of a conservative bureaucratic mechanism.

Finally, the existence of patents is helpful to encourage innovation, but the length of patents preserves monopoly power. Since the length of patents is somewhat arbitrary, they could be changed. However, it is important that the incentives encouraged by patents be preserved, so one should err on the side of caution.

Certificates of Need

Certificates of Need (CONs) prevent specialty hospitals from competing with general hospitals. Barnes (2006) reports that 36 states

(and the District of Columbia) require at least some government permission to open, expand, or modify most kinds of health care facilities. Sometimes, the prohibitions are broad, preventing any competition; other times the prohibitions are limited to one or a few health care services. Consequently, the monopoly power and the costs imposed on society vary with the context of the law (Cordato 2006).

Barnes (2006) finds the genesis of CONs in Rochester, New York, in 1964, leading to the passage of the first state law in New York in 1966, and eventually culminating in the National Health Planning and Resources Development Act of 1974. One component of the law made federal funds contingent on states establishing CON laws (McGinley 1995).

Most states soon developed state planning boards to "investigate state facility needs" and review applications for CONs (King 2009). Part of the motivation was cost reduction by avoiding service duplication. Although this is possible, the other angle is that monopoly power could easily reduce quality and increase costs. Barnes (2006: 2) reports that, in 1982, "The federal government acknowledged the failure of its Certificate of Need law to reduce health care costs." Congress repealed NHPRDA in 1986, and 14 states have since repealed their CON laws.

Proponents of CONs complain about having to provide indigent care and accuse specialty hospitals of "cherry picking," but Herzlinger (2007) notes that hospitals receive tens of millions of dollars in tax-exemption subsidies as well as direct payments from governments; indigent care turns out to be a modest price to pay. Moreover, there is considerable controversy over how to measure the value of services to the indigent. Not surprisingly, hospitals have an incentive to inflate the apparent value by choosing the highest available measures of cost. Gruber and Rodriguez (2007) find that uncompensated care is often compared to list prices rather than to prices paid for insured care.

Specialized hospitals are important at the micro level: they increase competition and choice. Herzlinger (2004b) refers to them as "focused factories," and thinks they will become even more important in the future.

More Freedom in Labor and Service Markets

Labor regulations that unduly restrict the provision of health care services by trained medical personnel who are not doctors should

be repealed or reduced. States vary by the degree to which they require doctors to regulate nurse practitioners (Graham 2008a, King 2009). Mandatory licensing standards can reduce uncertainty, but they restrict competition and enhance monopoly power. They will certainly increase costs, and at an extreme, they can actually reduce quality since providers do not need to be as worried about competition. Mandatory licensing is often viewed as a signal of quality when it might instead act as a cover for low-quality work. In contrast, *voluntary* "licensing" can convey information and signal quality more effectively—whether by degrees, certification, or other credentials.

Telemedicine (the outsourcing of medical services with a focus on electronic delivery) should also be encouraged. Many other professions allow compensation for work done on the phone or by e-mail. Medicare and other insurance providers could allow this flexibility when services can be effectively conveyed over the phone, e-mail, and video (e.g., radiology and monitoring intensive care units). This approach can be especially effective where economies of scale are not sufficient to allow an on-site specialist. As Singh and Wachter (2008: 1622) note, "Low-cost labor, time-zone differences and telecommunication advances have 'flattened' the world of business," and some types of health care.[5] Again, mandatory licensure is a factor. Allowing licensure to be voluntary or allowing doctors to practice across state lines would enhance competition and health outcomes.

Laws that prevent non-physicians from hiring physicians (e.g., to work in a health kiosk or in a clinic) should be eliminated. Restrictions on the immigration of skilled medical personnel should also be relaxed. Doing so would be beneficial and provide consumers will more services and reduce costs.

What Would a Market-Based System Look Like?

No one knows for sure what a truly free market in health care would look like. This article has examined many of the probable changes in health care that could occur in the absence of perverse

[5]Singh and Wachter (2008) discuss the regulatory and legal issues surrounding medical outsourcing and telemedicine. Wachter (2006) presciently predicts the probability that interest groups will seek to use government to restrict competition in this realm.

government intervention, but what innovations could occur in the future once government is out of the way remains speculative. Of course, government would still play an important role in protecting life, liberty, and property, by preventing fraud and enforcing contracts, but its over-reaching role in health care would be substantially reduced.

One clue about this part of the puzzle is to look at the historical record prior to substantial government intervention in health care —to the "fraternal societies" in America (Siddeley 1992; Beito 1994, 2000) and the "friendly societies" in England (Chodes 1990, Chalupnicek and Dvorak 2009). Those voluntary organizations were formed on the basis of common social traits (class, ethnicity, occupation, geography), common moral values (patriotism and thrift), and economic needs. The most important functions were mutual aid, the provision of "lodge doctors," and a thriving social community. In the provision of aid and services, they developed ingenious low-cost ways to deal with the moral hazard problem, adverse selection, and free-riders.

Fraternal societies peaked at about one-third of the population in the 1920s. So they were significant players in the health care markets and dominated the life insurance field for a time. Fraternal societies declined precipitously in the 1930s as their usefulness diminished, especially in the face of political competition from the government's leaps into Social Security and welfare. One lesson from this experience is that it does not take long for government to crowd out private sector activities (Schansberg 2001).[6]

Fraternal and friendly societies provided health care effectively for their members. It was mutually beneficial trade between the individuals and the group, and between the group and the lodge doctor. Doctors contracted with lodges to provide general medical care for a fixed fee. This was a natural way for some doctors to get started in the profession, giving them an established base and the ability to easily develop community contacts.

Of course, such organizations today would be limited in their ability to replicate the range of services offered by fraternal and friendly societies, but similar entrepreneurial efforts are possible and already exist—from Christian health co-ops (e.g., Health Care Sharing Ministries) to open health care co-ops (e.g., Group

[6]For a discussion of the crowding out of the private for-profit sector by the public sector, see Gruber and Simon (2008) and Cutler and Gruber (1996).

Health Cooperative in Washington). Even though these models are successful, it would probably be difficult to increase them quickly if at all beyond their current 1 percent market share.

All of these voluntary organizations are reminiscent of Burke's "little platoons" and the capacity for small groups with common interests to come together and work effectively toward common goals. These "little platoons" can be an important, if small, part of a market solution to health care and insurance.

Best Practices: Lessons from Innovative Employer Plans

There are hundreds of examples where market participants are currently innovating and experimenting in the field of health care and insurance. The following are a few examples.

Safeway

Safeway's "Healthy Measures" program (and its Coalition to Advance Healthcare Reform) kept health care costs flat from 2005–09. Observing that most health care costs come from four largely avoidable chronic conditions (cancer, heart disease, diabetes, and obesity), Safeway began to charge different premiums for different risks.[7] The company started voluntary programs that focused on tobacco, weight, blood pressure, and cholesterol. If employees met certain standards, their premiums were reduced $780 for individuals and $1,560 for families. Burd (2009) estimated that this program, if adopted nationally, would have saved $550 billion since 2005.

Whole Foods Market

Whole Foods Market pays 100 percent of the premiums for their high-deductible health-insurance plan for all employees who work at least 30 hours per week (about 89 percent of their employees). WFM also deposits up to $1,800 per year into workers' Personal Wellness Accounts depending on their success in making healthy choices. Unspent funds roll over into a new year and grow over time. WFM employees spend their own health care dollars until the annual deductible is covered and the insurance kicks in. According

[7]Burd (2009) reports that the 1996 HIPAA law allows different premiums connected to behaviors, but it still limits the differences in premiums with an arbitrary ceiling. For example, the additional $312 premium allowance for tobacco is better than nothing, but still does not cover the $1,400 in higher expected costs.

to CEO John Mackey (2009: 15), "Our plan's costs are much lower than typical health insurance, while providing a very high degree of worker satisfaction."

Mackey (2004) also acknowledges some "major challenges." For example, since so few companies are doing these sorts of things, it makes it more difficult for one company to do it: "Doctors don't compete on the basis of price. They don't know the cost of their services. . . . Also, people aren't used to shopping around. They're not used to asking about price."

However, if more firms adopt the WFM plan, the market will gain momentum. Mackey (2004) also has some sobering news: "We cannot underestimate the fact that many people . . . do not want to take responsibility for their own lives and their own health and their own well-being."

Wendy's

Wendy's has been aggressive about getting people to take advantage of HSAs. The restaurant chain has a 100 percent account opening rate among its employees, and at the end of 2006 about 95 percent of them had positive balances.

Wendy's developed a long-term strategy for the delivery of health care services, emphasizing costs, healthier workers, and personal responsibility for health care decisions. In 2005 costs increased by only 1 percent; in 2006 they were stable. In 2007 Wendy's introduced a drug plan with preventive drugs whose costs were not subject to the deductible. They also kept premiums stable for those who took a health assessment and gave $50 gift cards to those who took steps as a result of the assessment.

Wal-Mart

Wal-Mart has recently ventured into the health care market. At some stores, they now offer walk-in appointments with inexpensive health care services by leasing store space to private health clinics. Along with its $4 prescriptions, these services benefit many people, especially those without health insurance (Brown 2008).

Nearly half of their clinic patients report that they are uninsured. Wal-Mart comments that many customers have said that "if it were not for our clinics, they wouldn't have gotten care—or they would've had to go to an emergency room. By visiting one of our

clinics, patients receive the care they need and at the same time reduce overcrowding in emergency rooms and eliminate the costs of unnecessary hospital visits."[8]

Other Examples

The following examples briefly illustrate the various approaches that market participants take today—even in the face of government regulations and a dysfunctional health insurance system.

Dr. Robert Berry's practice, PATMOS (Payment At TiMe Of Service), is a six-year-old clinic in Greeneville, Tennessee, with 7,000 clients. Berry was named the winner of the 2006 "Pioneer in Medical Practice" by Consumers for Health Care Choices. He does not accept insurance. He lists prices for various services on the wall of his waiting room, and his prices are one-third to one-half of those using insurance (Belz 2007).

Hello Health does not accept insurance but offers innovative service delivery with modest prices (Howard 2010). Quick contacts (e-mails, texts, instant messaging) are free, along with simple lab tests and two months of generic drug prescriptions. Physicians using Hello Health can set their own fee schedules. For example, Dr. Sean Khozin, one of the founding doctors, charges $35 per month for membership and $125 for office and video visits. This service is especially attractive to those with HSAs and a high-deductible health insurance plan.

CrossOver health clinic provides free health care to 4,300 uninsured patients with a $2.5 million budget in Richmond, Virginia. The clinic provides free check-ups and free medications for chronic conditions, trying to avoid bigger problems later. It also receives important assistance from local hospitals. CrossOver is staffed by 30 full-time and part-time workers, and 350 volunteers (Belz 2009). More broadly, clinics often get support from churches, private grants, individual donations, pharmacies that donate medicine, and hospitals and labs that donate services (Pitts 2009).

The HealthAllies division of United Health Group, one of the largest insurance providers in the country, provides a non-insurance service that negotiates discounts with providers for an annual fee of $300.

[8]See walmartstores.com/HealthWellness/7613.aspx.

Herzlinger (2004a) gives a lot of attention to the Buyers Health Care Action Group (BHCAG), a coalition of large employers in Minneapolis and St. Paul that contracts directly with 25 care systems—negotiating price, adjusting group compositions for the risk of their enrollees, and incentivizing enrollees to think about their cost/coverage trade-offs. BHCAG is the earliest prototype for "consumer-driven health insurance" (Herzlinger 2004a, Robinow 2004, Harris et al. 2004).

HealthTrac implements a "self-care movement" program where consumers are actively encouraged to increase self-management skills, particularly with respect to the threat of chronic health conditions. Their program focuses on questionnaires, dialogue, and education, and has registered a number of impressive successes (Fries 2004).

Along the same lines, in "accountable care organizations," doctors and hospitals agree to take joint responsibility for patient well-being. They establish targets and goals, based on a spending baseline and adjusted for health status, and are rewarded by bonuses if they reach their goal. Andrews (2009) describes this accomplishment in the context of Medicare/Medicaid.

HealthSync, founded by health actuary Ray Herschman, provides health services to firms and does not restrict product designs by the insurers. To deal with adverse selection, HealthSync pays insurers more for enrolling sick people (Herzlinger 2004c).

Dr. Devi Shetty has brought mass-production, lower-cost heart surgery to India (Anand 2009). At his huge specialized hospitals, heart surgeries cost about $2,000 and have mortality rates that match those in Western hospitals.

These free market solutions to health care are just the beginning. Reducing the role of third parties would dramatically promote additional experimentation with supply-side remedies to increase choice and lower the costs of health care.

Conclusion

It is increasingly obvious that government solutions to health care are not effective. People often find market outcomes appealing. Proponents of free markets in health care should work to make the most persuasive case for real reform and to achieve incremental reforms where possible.

References

Aaron, H., and Reischauer, R. (1995) "The Medicare Reform Debate: What Is the Next Step?" *Health Affairs* 14 (Winter): 8–30.

Adams, S. (2004) "Employer-Provided Health Insurance and Job Change." *Contemporary Economic Policy* 22 (3): 357–69.

Anand, G. (2009) "The Henry Ford of Heart Surgery." *Wall Street Journal* (25 November).

Andrews, M. (2009) "Making Health Care Accountable." *New York Times* (9 October).

Armey, R. (2009) "Individual Mandate Would Be a Healthcare Industry Boondoggle." *U.S. News and World Report* (28 September).

Baicker, K., and Chandra, A. (2005) "Defensive Medicine and Disappearing Doctors?" *Regulation* 28 (3–4): 24–31.

Barnes, J. (2006) *The Failure of Government Central Planning: Washington's Medical Certificate of Need Program.* Seattle: Washington Policy Center.

Bast, J. (2007) *Ten Principles of Health Care Policy.* Chicago: Heartland Institute.

Beito, D. (1994) "Lodge Doctors and the Poor." *The Freeman* 44 (5): 220–25.

_____ (2000) *From Mutual Aid to Welfare State: Fraternal Societies and Social Services, 1890–1967.* Chapel Hill: UNC Press.

Belz, E. (2009) "CrossOver Appeal." *World* (26 September).

Belz, J. (2007) "Robert's Rules." *World* (20 January).

Berwick, D. (2010) "Securing Medicare." Available at http://blog.medicare.gov/2010/08.

Bond, M. (2009) "Applying the Lessons of State Health Reform." *NCPA Policy Report* No. 323. Dallas: National Center for Policy Analysis.

Brown, C. (2008) "Private-Sector Health Care Leads the Way." *Mises Daily* (3 December).

Bunce, V. (2002) *Dirty Little Secrets about Clean Claims Laws.* Alexandria, Va.: Council for Affordable Health Insurance.

Bunce, V, and Wieske, J. P. (2009) *Health Insurance Mandates in the States (2009)* Alexandria, Va.: Council for Affordable Health Insurance.

Burd, S. (2009) "How Safeway Is Cutting Health-Care Costs." *Wall Street Journal* (12 June).

Cardon, J., and Hendel, I. (2001) "Asymmetric Information in Health Insurance: Evidence from the National Medical Expenditure Survey." *RAND Journal of Economics* 32 (3): 408–27.

Chalupnicek, P., and Dvorak, L. (2009) "Health Insurance before the Welfare State: The Destruction of Self-Help by State Intervention." *Independent Review* 13 (3): 367–87.

Chodes, J. (1990) "Friendly Societies: Voluntary Social Security and More." *The Freeman* 40 (3): 95–98.

Cochrane, J. (1995) "Time-Consistent Health Insurance." *Journal of Political Economy* 103 (3): 445–73.

_____ (2009a) "Health-Status Insurance: How Markets Can Provide Health Security." *Cato Policy Analysis* No. 633. Washington: Cato Institute.

_____ (2009b) "What to Do about Preexisting Conditions." *Wall Street Journal* (14 August).

Congressional Budget Office (2004) *Limiting Tort Liability for Medical Malpractice.* Washington: CBO.

Conover, C. (2004) "Health Care Regulation: A $169 Billion Hidden Tax." *Cato Policy Analysis* No. 527. Washington: Cato Institute.

Conover, C., and Miller, T. (2010) "Why a Public Plan Is Unnecessary to Stimulate Competition." AEI Working Paper. Washington: American Enterprise Institute.

Cordato, R. (2006) "CON Game: It's Time to Repeal Hospital Certificate-of-Need Laws." In J. Graham (ed.) *What States Can Do to Reform Health Care*, 37–48. San Francisco: Pacific Research Institute.

Crocker, K., and Moran, J. (2003) "Contracting with Limited Commitment: Evidence from Employment-Based Health Insurance Contracts." *RAND Journal of Economics* 34 (4): 694–718.

Cutler, D. (1996) "Restructuring Medicare for the Future." In R. Reischauer (ed.) *Setting National Priorities*, 197–234. Washington: The Brookings Institution.

Cutler, D., and Gelber, A. (2009) "Changes in the Incidence and Duration of Periods without Insurance." *New England Journal of Medicine* 360 (17): 1740–48.

Cutler, D., and Gruber, J. (1996) "Does Public Insurance Crowd Out Private Insurance?" *Quarterly Journal of Economics* 111: 391–430.

Cutler, D., and Reber, S. (1998) "Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection." *Quarterly Journal of Economics* 113 (2): 433–66.

Diamond, P. (1992) "Organizing the Health Insurance Market." *Econometrica* 60: 1233–54.

DiMasi, J.; Hansen, R.; and Grabowski, H. (2003) "The Price of Innovation: New Estimates of Drug Development Costs." *Journal of Health Economics* 22 (2): 151–85.

Emanuel, E., and Fuchs, V. (2005) "Health Care Vouchers: A Proposal for Universal Coverage." *New England Journal of Medicine* 352 (12): 1255–60.

Emmons, D.; Guardado, J.; and Kane, C. (2008) *Competition in Health Insurance: A Comprehensive Survey of U.S. Markets*. Chicago: American Medical Association.

Fenn, P.; Gray, A.; and Rickman, N. (2007) "Liability, Insurance and Medical Practice." *Journal of Health Economics* 26 (5): 1057–70.

Fries, J. (2004) Healthtrac: "Proven Reduction of the Need and Demand for Medical Services." In R. Herzinger (ed.) *Consumer-Driven Health Care*, 523–31. San Francisco: John Wiley.

Fudenberg, D.; Holmstrom, B.; and Milgrom, P. (1990) "Short-Term Contracts and Long-Term Agency Relationships." *Journal of Economic Theory* 51: 1–31.

General Accounting Office (2003) *Medical Malpractice: Implications of Rising Premiums on Access to Health Care.* Washington: GAO.

Goodman, J., and Musgrave, G. (1994) *Patient Power: The Free-Enterprise Alternative to Clinton's Health Plan*. Washington: Cato Institute.

Graham, J. (2008a) *U.S. Index of Health Ownership*. 2nd ed. San Francisco: Pacific Research Institute.

_____ (2008b) *From Heart Transplants to Hairpieces: The Questionable Benefits of State Benefit Mandates for Health Insurance.* San Francisco: Pacific Research Institute.

Groppe, M. (2009) "Debating a Health Care Overhaul: Indiana Facts." *Courier-Journal* (5 October).

Gruber, J., and Rodriguez, D. (2007) "How Much Uncompensated Care Do Doctors Provide?" *Journal of Health Economics* 26 (6): 1151–69.

Gruber, J., and Simon, K. (2008) "Crowd-Out Ten Years Later: Have Recent Public Insurance Expansions Crowded Out Private Health Insurance? *Journal of Health Economics* 27 (2): 201–17.

Harris, K.; Feldman, R.; Schultz, J.; and Christiansen, J. (2004) "The Buyers Health Care Action Group: Consumer Perceptions of Quality Differences." In R. Herzinger (ed.) *Consumer-Driven Health Care*, 475–86. San Francisco: John Wiley.

Hendel, I., and Lizzieri, A. (2000) "The Role of Commitment in Dynamic Contracts: Evidence from Life Insurance." NBER Working Paper, W7470. Cambridge: Mass.: National Bureau of Economic Research.

Herring, B., and Pauly, M. (2006) "Incentive-Compatible Guaranteed-Renewable Health Insurance Premiums." *Journal of Health Economics* 25 (3): 395–417.

Herzlinger, R. E. (2004a) "Consumer-Driven Health Insurance." In R. E. Herzlinger (ed.) *Consumer-Driven Health Care*, 74–101. San Francisco: John Wiley.

_____ (2004b) "Health Care Productivity." In R. E. Herzlinger (ed.) *Consumer-Driven Health Care*, 102–26. San Francisco: John Wiley.

_____ (2004c) "The Silent Revolution." In R. E. Herzlinger (ed.) *Consumer-Driven Health Care*, 127–52. San Francisco: John Wiley.

_____ (2007) *Who Killed Health Care?* New York: McGraw-Hill.

Howard, P. (2010) "Hello Health, Goodbye Hassle." Available at www.city-journal.org/2010/eon0112ph.html.

Hunter, J. R.; Cassell-Stiga, G.; and Doroshow, J. (2009) *True Risk: Medical Liability, Malpractice Insurance and Health Care*. New York: Americans for Insurance Reform.

Joint Committee on Taxation (2009) "Background Materials for Senate Committee on Finance Roundtable on Health Care Financing," JCX–27–09. Washington: U.S. Congress, Joint Committee on Taxation.

Joint Economic Committee (2009) *Are Health Care Reform Cost Estimates Reliable?* Washington: U.S. Congress, Joint Economic Committee.

Kessler, D., and McClellan, M. (1996) "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111 (2): 353–90.

_____ (2002) "How Liability Law Affects Medical Productivity." *Journal of Health Economics* 21 (6): 931–55.
King, D. (2009) "State Health-Care Reform: A Resource for State Legislators." Mercatus Center Policy Resource No. 6. Fairfax, Va: George Mason University.
Laffer, A. (2009) "How to Fix the Health-Care 'Wedge.'" *Wall Street Journal* (5 August).
Mackey, J. (2004) "Whole Foods Market's Consumer-Driven Health Plan." Speech at the State Policy Network 12th Annual Meeting. Available at www.worldcongress.com/news/Mackey_Transcript.pdf.
_____ (2009) "The Whole Foods Alternative to Obama Care." *Wall Street Journal* (11 August).
Madden, B. (2007) *More Choices, Better Health*. Chicago: Heartland Institute.
_____ (2010) *Free to Choose Medicine*. Chicago: Heartland Institute.
Malcomson, J., and Spinnewyn, F. (1988) "The Multi-period Principal-Agent Problem." *Review of Economic Studies* 55: 391–407.
Matthews, M. (2005) "Health Care: The Future of Consumer-Driven Health Care" In J. Bast (ed.) *2005 Emerging Issues*: 63–66. Chicago: Heartland Institute.
McGinley, P. J. (1995) "Beyond Health Care Reform: Reconsidering Certificate-of-Need Laws in a Managed Competition System." *Florida State University Law Review* 23 (14): 141–83.
Miller, H. (1998) "Failed FDA Reform." *Regulation* 21 (3): 24–30.
_____ (2000) *To America's Health: A Proposal to Reform the Food and Drug Administration*. Stanford, Calif.: Hoover Press.
Olson, M. (2008) "The Risk We Bear: The Effects of Review Speed and Industry User Fees on New Drug Safety." *Journal of Health Economics* 27 (2): 175–200.
Parente, S., and Bragdon, T. (2009) "Healthier Choice: An Examination of Market-Based Reforms for New York's Uninsured." *Medical Progress Report* No. 10. New York: Manhattan Institute.
Pauly, M., and Herring, B. (1999) *Pooling Health Insurance Risks*. Washington: American Enterprise Institute.
Pitts, E. (2009) "Patients and Partners." *World* (21 November).
Rettenmaier, A., and Saving, T. (2009) "The Elephant in the Room: Coping with the Long-Term Problem of Medicare Costs." *The Economists' Voice* 6 (5).

Rey, P., and Salanie, B. (1990) "Long-Term, Short-Term and Renegotiation: On the Value of Commitment in Contracting." *Econometrica* 58: 597–619.

Robinow, A. (2004) "The Buyers Health Care Action Group: Creating Incentives to Seek the Sick." In R. Herzinger (ed.) *Consumer-Driven Health Care*, 309–16. San Francisco: John Wiley.

Robinson, J. (2004) "Consolidation and the Transformation of Competition in Health Insurance." *Health Affairs* 23 (6): 11–24.

Santerre, R. (2007) "Tracking Uninsurance and Inflation in the U.S. Health Economy." *Pravartak: The Journal of Insurance and Risk Management* 3: 79–89.

Satel, S. (2006) "Organs for Sale." *The American* (November/December): 84–90.

_____ (2009) *When Altruism Isn't Enough: The Case for Compensating Kidney Donors*. Washington: AEI Press.

Schansberg, D. E. (2001) "Fraternal Societies and Social Concern." *Religion and Liberty* 11 (1): 11–12.

Siddeley, L. (1992) "The Rise and Fall of Fraternal Insurance Organizations." *Humane Studies Review* 7 (2): 13–16.

Singh, S., and Wachter, R. (2008) "Perspectives on Medical Outsourcing and Telemedicine: Rough Edges in a Flat World?" *New England Journal of Medicine* 358 (15): 1622–27.

Sloan, F., and Conover, C. (1998) "Effects of State Reforms on Health Insurance Coverage of Adults." *Inquiry* 35: 280–93.

Sloan, F., and Shadle, J. (2009) "Is There Empirical Evidence for 'Defensive Medicine'? A Reassessment." *Journal of Health Economics* 28 (2): 481–91.

Tabarrok, A. (2000) "The Anomaly of Off-Label Drug Prescriptions." *Independent Review* 5 (1): 25–53.

Tanner, M. (2010) *Bad Medicine: A Guide to the Real Costs and Consequences of the New Health Care Law*. Washington: Cato Institute.

Thomasson, M. (2002) "From Sickness to Health: The Twentieth-Century Development of U.S. Health Insurance." *Explorations in Economic History* 39 (3): 233–53.

_____ (2003) "Health Insurance in the United States." In R. Whaples (ed.) *EH.Net Encyclopedia* (eh.net/encyclopedia/article/thomasson.insurance.health.us).

Wachter, R. (2006) "The 'Dislocation' of U.S. Medicine: The Implications of Medical Outsourcing." *New England Journal of Medicine* 354 (7): 661–65.

Wieske, J. P., and Matthews, M. (2007) *Understanding the Uninsured and What to Do about Them.* Alexandria, Va.: Council for Affordable Health Insurance.

Zycher, B. (2009) "HSA Health-Insurance Plans after Four Years: What Have We Learned?" *Medical Progress Report* (8). Available at www.manhattan-institute.org/html/mpr_08.htm.