The Heritage Foundation
LEADERSHIP FOR AMERICA

BACKGROUNDER

No. 2833 | AUGUST 19, 2013

Competitive Markets in Health Care: The Next Revolution

Kevin D. Dayaratna

Abstract

This literature review of academic research suggests that competitive markets in health care can offer patients greater quality, more options, and lower costs. The Federal Employees Health Benefits Program and Medicare Part D serve as two illustrative examples of competition in health care today. Proper reforms to add further competition to the health care industry would be quite significant and would further America's position as the world's leader in health care for years to come.

Over the course of the past several decades, federal and state lawmakers have proposed a variety of initiatives to reform America's health care system and reduce costs. One idea has been to instill competition in the health care markets to enable the industry to operate more like a traditional market.

Regrettably, the Congressional Budget Office (CBO) has remained unable to score the financial gains resulting from competition in health care. In fact, after being presented with a competition-based Medicare premium support proposal in 2012, CBO Director Douglas Elmendorf told the House Budget Committee: "We are not applying any additional effects of competition on this growth rate over time in our analysis of your proposal. And, again, we don't have the tools, the analysis, we would need to do a quantitative evaluation of the importance of those factors,"[1] suggesting that the dearth of evidence prevents the CBO from making substantive predictions of savings that could result from competition. This study suggests the opposite, specifically that recent research

Key Points

- The body of peer-reviewed academic literature suggests that health care can and should operate like a traditional market.
- Market-oriented reforms have the potential to improve the quality and cost-effectiveness of care, as demonstrated by the Federal Employees Health Benefits Program (FEHBP) and Medicare Part D.
- Consumer-driven health plans are viable alternatives to traditional plans, and consumers should have the option of choosing such plans.
- Proper risk adjustment mechanisms can prevent adverse selection.
- Migrating toward value-based payment systems will result in greater quality of care at lower costs, in part by incentivizing the health care industry to make great strides in offering integrated care, innovative treatments, and personalized medicine.

This paper, in its entirety, can be found at **http://report.heritage.org/bg2833**
Produced by the Center for Data Analysis

The Heritage Foundation
214 Massachusetts Avenue, NE
Washington, DC 20002
(202) 546-4400 | heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

in fact illustrates the potential gains from competition in health care.

A classic argument, made by Kenneth Arrow and others, is that health care is inherently different from other competitive industries and is therefore incapable of functioning in a similar manner.[2] However, the evolution of the health care industry, coupled with recent academic literature, suggests that health care can and should operate like many other industries. In fact, the academic literature suggests that proper reforms to move health care in this direction would significantly increase quality of care at lower cost.[3]

This paper discusses academic research pertaining to competition in health care and earlier attempts to instill competition into health care markets by looking at managed care, a previous attempt at competition in health care.

Utilization of Care

One of the best-known studies on health utilization is the RAND health insurance experiment led by health economist Joseph Newhouse.[4] The RAND study compared health care consumption between subjects that had free health care, resulting in "over-covered" health insurance, and subjects that were required to share the costs of their health care through coinsurance. The researchers found that over-coverage for health insurance led to overconsumption of outpatient as well as inpatient services. They also found that cost sharing had the capacity to reduce necessary care.

The Dartmouth Institute for Health Policy and Clinical Practice conservatively estimates that 30 percent or more of U.S. health care spending is on unnecessary care.

The employer-based health insurance system has exacerbated this overconsumption of care. The Dartmouth Institute for Health Policy and Clinical Practice conservatively estimates that 30 percent or more of U.S. health care spending is on unnecessary care.[5] Since over-coverage reduces the costs of risky behaviors, such as unhealthy eating and smoking, people with unnecessary insurance coverage have less incentive to make healthy lifestyle choices.

Although the RAND study also found that cost sharing reduces necessary care, the academic literature, which is discussed in detail in subsequent sections, suggests that the health care industry has already begun to promote better alternatives for consumers. For example, many consumer-directed plans incentivize involvement in wellness and self-management programs. Additionally, an increasing number of plans offer consumers the option to waive or reduce their deductibles for preventive care. Much more information is now available, especially online, to consumers who are seeking information about providers, treatments, and illnesses.

The following sections discuss a number of problems with the health care system in the United States. One particular problem is federal and state policies that restrict consumers in how they can purchase insurance.

Creating a National Marketplace for Insurance

Due to the McCarran–Ferguson Act of 1945, group and individual health insurance must largely be purchased within one's own state.[6] Consequently, lobbyists have persuaded local and state officials to mandate extraneous benefits on insurance companies. Such regulations include mandates for alcoholism treatment (45 states), smoking-cessation programs (two states), drug-abuse treatment (34 states), acupuncture (11 states), chiropractic care (44 states), naturopathy (four states), and hair pieces (10 states). In some cases, consumers are required to purchase coverage for services that they might be better off financially purchasing directly. Such services include mammograms (50 states), treatment for cervical cancer (29 states), colorectal cancer (28 states), newborn hearing (17 states), ovarian cancer (three states), prostate cancer (33 states), uncomplicated deliveries (21 states), and well-child care (31 states).[7] These state-based mandates, coupled with other onerous regulations, drive up the cost of health insurance.[8]

In 2011, Stephen Parente, Roger Feldman, Jean Abraham, and Yi Xu published research in the *Journal of Risk and Insurance* about developing a national marketplace for individual health insurance.[9] Using 2005 Medical Expenditure Panel Survey data, they performed a series of microsimulations to

determine how the market would evolve if consumers could purchase health insurance across state lines. They looked at a number of options, including dividing the country by regions and allowing for regional competition among state-based insurance markets as well as a nationally competitive market. Their results suggest that reforms to enable people to purchase insurance across state lines could lower the number of uninsured Americans by over 12 million due to reduced premiums. The Parente et al. study thus clearly illustrates that a competitive, national marketplace for health insurance could greatly expand consumer choice and reduce costs.

Consumer Choice in Health Care

For quite some time a number of facets of the health care industry have consistently lent themselves to free market principles. For example, in 1994, Goutam Chakroborty, Richard Ettenson, and Gary Gaeth published research in the *Journal of Health Care Marketing* examining consumer choice of health insurance.[10] The authors estimated a multinomial logistic regression model and found that 19 factors had a statistically significant impact on insurance choice. The most important factors were hospitalization coverage, doctor choice, premium costs, dental coverage, and hospital choice.

Subsequent academic studies have consistently illustrated that people can be quite sensitive to health insurance premium levels in making insurance purchasing decisions.[11] A 1997 study by Thomas Buchmueller and Paul Feldstein that was published in the *Journal of Health Economics* illustrates that consumers are price sensitive and choose plans as a result of premium increases.[12] A 2012 study by Jonathan Ketcham and his colleagues found that people learn from past experiences with prescription drug plans. In particular, they found that when offered more choices, people switch away from plans that do not cost-effectively cover their prescription drug needs and instead migrate toward plans that do.[13] Other research has shown that information on quality increases this price sensitivity and subsequent demand for health insurance.[14] A number of academic studies suggest that hospital choice is grounded by the fundamentals of consumer decision making.[15] With information provided online by websites such as vitals.com and healthgrades.com, comparing medical providers has become almost second nature to many.[16] This consumer-oriented approach to medical care will become increasingly pervasive in American society as such information continues to proliferate on the Web.

Consumer-directed health plans (CDHPs) enable people to treat their health care expenses like many of their other expenses. Many plans allow members to use health savings accounts (HSAs) and health reimbursement accounts (HRAs) to pay directly for their health care expenses. CDHPs are often accompanied by high deductibles to cover catastrophic illnesses (often referred to as HDHPs). In 2003, HSAs were instituted as part of the Medicare Prescription Drug, Improvement, and Modernization Act.[17] HSAs enable people to save money in tax-free accounts, which they can then use for medical expenditures.

CDHPs thus represent a significant departure from the way that health care has traditionally operated in this country by enabling consumers to make their own choices. Enrollment in CDHPs grew 43 percent in 2012, and individuals in such plans were significantly more cost conscious and vigilant about their own health.[18] These plans have also been credited with slowing the growth rate of health care spending.[19]

CDHPs thus represent a significant departure from the way that health care has traditionally operated in this country by enabling consumers to make their own choices.

The Healthy Indiana Plan. CDHPs enable people to be more prudent about their medical expenses. Academic research has found that CDHPs have always been an attractive choice to consumers, are a potentially valuable tool for reducing costs, and may ultimately lead to greater price transparency.[20] In 2010, Indiana Governor Mitch Daniels signed into law the Healthy Indiana Plan, offering HSA plans to state employees and their families. A 2010 study conducted by the independent Mercer Health and Benefits group found that the HSAs reduced the state's health care expenditures by approximately 11 percent between 2006 and 2009. The results suggested that Indiana's health care reforms incentivized people to become more cost conscious in their health care shopping, prompting them to compare

providers, shop around for the best treatments, and weigh the prices of generic medications against brand-name medications.[21]

By offering consumers a vested interest in their health care expenditures, CDHPs incentivize people to shop around for their health care needs. A number of academic studies, which are discussed in the next section, look at utilization of these plans.

Academic Research on Consumer-Driven Health Care Reform. There is a plethora of academic research on consumer-driven health care. In a study published in the *International Journal of Integrated Care,* Dennis Kodner synthesized extant research on consumer-directed forms of home care.[22] His study found that those who self-direct their care have greater control and express higher degrees of satisfaction over the services they receive. These patients also note greater quality as a result of being able to direct their own medical expenses. In addition, the utilization of independent home care workers, including family members, resulted in greater services at lower costs.

Another insightful study by Frank Wharam and his colleagues in the *Journal of the American Medical Association*[23] examined the effect of HDHPs versus traditional plans on emergency room (ER) use and subsequent hospitalizations. Through a series of generalized linear model regressions, the authors found a number of important results. First, patients in traditional health plans who switched to HDHPs visited ERs 10 percent less frequently than those remaining in traditional plans. This reduction occurred mostly among patients with illnesses of low and indeterminate severity, implying that HDHP members differentiate between low-severity conditions that do not necessarily require emergency department care and more serious conditions. Additionally, the number of repeat ER visits dropped 25 percent among HDHP members compared with those in traditional plans.

In addition to the decline in ER visits, the Wharam study found a 27 percent relative reduction in ER-related hospitalization rates among HDHP users. Upon admission to the hospital, HDHP users stayed as patients for a shorter time (21 percent) than individuals on traditional insurance.

In addition to these studies, a few other notable publications in the academic literature pertain to consumer choice and consumer-driven health care:

- In 2004, Adam Atherly, Bryan Dowd, and Roger Feldman published a study in *Health Services Research* on the effect of consumer choice among seniors.[24] Using a logistic regression model, the authors found that premiums, as well as plan benefits, have a statistically significant effect on consumer choice of insurance plans. The authors also found considerable heterogeneity among the plans that individuals prefer.

- In 2005, Roger Feldman and his colleagues published a simulation study in *Health Affairs* that estimated the effect of HSA tax credits. [25] They found that these credits could lessen the number of uninsured by as many as 2.9 million at a cost of $8.1 billion annually.

- In 2008, Stephen Parente and colleagues published another study in *Health Services Research* looking at the effects of CDHPs on pharmaceutical spending and utilization compared with multi-tiered benefit packages for pharmaceutical products.[26] The authors found that CDHPs were associated with costs equal, if not lower, than more traditional alternatives. They also found that CDHPs increase the use of mail-order purchases, suggesting that CDHP enrollees may make a concerted effort to shop around for their health care needs.

- In that same year, Kavita Nair, Vahram Ghuschyan, and Joseph Saseen published research in the *Journal of Health Care Finance* looking at CDHPs and their impact on medically related utilization and expenditures.[27] Their logistic regression found significantly lower expenditures and utilization among CDHP enrollees compared with more traditional insurance enrollees in terms of emergency room visits, hospitalizations, outpatient visits, and prescription drug use.

- A 2011 study in *Medical Care Research and Review* looked at the impact of a child wellness program in Idaho. Several years ago, Idaho instituted a program to encourage families to take control of their children's health by offering credits to families that are current with well-child visits.[28] The program allowed families to use these credits toward their child's premiums. Within two years of the program's implementation, the

number of well-child visits increased by 116 percent.

- A 2012 study published in *Health Affairs* illustrates that CDHP enrollment has risen substantially in recent years.[29] The study also found that HSA use results in considerably lower spending, a heightened utilization of generic drugs versus brand-name drugs, and a reduction in the use of specialists. The authors project that increasing CDHP use among employer-sponsored plans from the present level of 12.4 percent to 50 percent would save more than $57.1 billion in annual national health expenditures.

In 2010, Anthony Lo Sasso, Mona Shah, and Bianca Frogner published one of the most noteworthy studies on consumer-driven health care reform in *Health Services Research*.[30] The study used a generalized linear model approach to examine HSA utilization by CDHP enrollees using data from a large spectrum of firms.

The authors found that spending by HSA enrollees for medical and pharmacy services grew at a slower rate when compared with more traditional plans. The authors also found that HSA use was associated with reduced spending of 5 percent to 7 percent compared with use by individuals in traditional plans. HSA use had the most notable effects on pharmacy spending with enrollees spending 6 percent to 9 percent less than enrollees in more traditional insurance. The Lo Sasso study illustrates that HSAs do indeed affect consumer decision making in health care. A more recent study published in the *American Journal of Managed Care* reaffirmed these findings.[31] This study also found that the presence of a deductible significantly reduced health care spending.

A study by Bijan Borah, Marguerite Burns, and Nilay Shah published in *Health Economics* also examined the effect of HDHP use on health care utilization and various medical costs.[32] They found that HDHPs are primarily effective at reducing health care spending among individuals with moderate health care consumption.

The Borah study thus suggests that consumer-driven health care plans are not necessarily for everyone, such as certain chronically ill patients. However, such plans should be among a variety of plans from which individuals can choose in a national marketplace. Given a diversity of options, people can choose the plan that best meets their personal needs.

Taken together, the academic research illustrates that CDHPs enable individuals to shop around for their health care and can reduce costs. The next section addresses two main criticisms of these types of plans.

Criticisms of Consumer-Driven Health Plans

There are two primary criticisms of consumer-driven health plans:

- CDHPs could encourage underutilization of care, which could have particularly adverse impacts for the chronically ill, as suggested by the RAND study.
- CDHPs could attract only healthy people, leading to adverse selection and a subsequent destabilization of the insurance market.

Do CDHPs Encourage Underutilization of Care? Many CDHPs require complete cost sharing until a deductible is met. Some research has expressed the concern that CDHP users may consequently underutilize necessary care as suggested by a RAND study.[33] A number of studies have suggested that the modest cost sharing typically concomitant with CDHPs may reduce patients' use of prescription drugs, including among the chronically ill.[34] A 2007 paper co-authored by Parente found higher hospital expenditures for CDHP users.[35] Critics take these studies to signify that the presence of CDHPs in the market will result in an overall trend of people not taking care of themselves. They go on to argue that the CDHPs will make people overly cautious and reluctant to spend their money on health care and will therefore avoid necessary and appropriate care.[36]

However, as Borah and his colleagues suggested, people are quite heterogeneous in their health care needs and behaviors.[37] Many critics ignore the fact that CDHPs will be just one of many options available in a properly designed marketplace. For example, a number of academic studies have suggested that variants of CDHPs are viable options for certain patients that might not necessarily be best suited for classic CDHPs. In one such study, published

in the *Annals of Internal Medicine*, Frank Wharam and his colleagues used a logistic regression model to determine the effect of HDHP plan membership on screening for breast, cervical, and colorectal cancer.[38] They found no statistically significant effect that belonging to such a plan affected patients' propensity to seek cancer screening when the tests were fully covered. However, they did find a statistically significant favorable substitution effect of a fully covered screening test (fecal occult blood testing) in place of exams subject to the deductible (colonoscopy, flexible sigmoidoscopy, and double-contrast barium enema).

Additionally, a recent study published in *Health Services Research* found that CDHP plans that cover medications considered essential to some patients assuage concerns about underutilization.[39] The authors reached this conclusion after estimating a generalized linear model and noticing that appropriately designed CDHPs did not reduce use of essential medications, such as lipid-lowering agents, antihypertensive, and COPD/asthma controllers.

First dollar coverage (FDC) of preventive services in HSAs was included as part of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003. FDC permits insurers to cover preventive services before the consumer has met that plan's deductible. A recent study published in *Health Services Research* looked at FDC of preventive services, including lipid screenings and mammograms, among preferred provider organization enrollees.[40] They found that FDC heightens utilization among healthy patients, especially among patients belonging to lower deductible insurance plans.

In a properly designed market with freely available information, patients could choose from these variants of consumer-oriented plans the plans that are right for them. Patients with chronic illnesses may choose to adhere to more traditional plans while others may choose CDHPs or their variants. With a diversity of plans available in the market, arguments that CDHPs will encourage an overall underutilization of care should not be a particular issue of concern.

Will CDHPs Lead to Adverse Selection? Some researchers have argued that bringing CDHPs to the market will result in adverse selection, with these plans attracting mostly healthy low-risk patients and traditional plans serving mostly chronically ill high-risk patients. These researchers claim that these high-risk patients will therefore have to suffer from higher costs.[41]

Adverse selection becomes a legitimate concern in markets that fail to institute appropriate risk-adjustment mechanisms. There are a number of ways to establish these mechanisms in the market.[42] Under one possible mechanism, state governments could institute and regulate state-based risk transfer pools.[43] These risk transfer pools would be intended to diversify the costs of the small number of patients with expensive medical conditions in an even manner across all insurers. Under the supervision of the state insurance department, insurance companies would be required to deposit funds (from their revenues) into one large risk transfer pool. The insurance companies could subsequently withdraw money from this pool, which will help them cover all patients, including the most expensive ones.

Adverse selection becomes a legitimate concern in markets that fail to institute appropriate risk adjustment mechanisms.

Under such a system, both the sick and the healthy could find the insurance coverage they desire. As demand for health care increases, including for the chronically ill, proper risk-adjusted treatment of health care would encourage treatment of all patients, promoting innovative and integrated approaches to care.[44]

Examples of Competition in Health Care Today

Medicare Part D and the Federal Employees Health Benefits Program (FEHBP) are examples of competition in health care today.

Medicare Part D. Established in 2003 as a component of the Medicare Prescription Drug, Improvement, and Modernization Act, Medicare Part D expanded the Medicare program to offer prescription drug benefits to seniors.[45] The expansion was based on a competitive bidding structure in which private insurance plans offer premium proposals to the federal government to charge for prescription drug benefits. Based on these bids, the

government then calculates its contribution, taking into consideration various regional factors.[46] Afterward, consumers choose from a variety of available plans with a diversity of benefits.[47]

Ever since Congress began debating the details of Medicare Part D, there have been critics of the approach.[48] However, the results since the program's inception have been quite astounding. As of 2012, more than 60 percent of Medicare participants are enrolled in Medicare Part D.[49] Nearly 90 percent of seniors are satisfied with their coverage, and almost 70 percent say that they are better off as a result.[50] Seniors' high degree of loyalty to their Part D plans further demonstrates this high level of customer satisfaction.[51]

The program as a whole is also operating significantly under budget. Some critics attribute this to lower than initially anticipated enrollment.[52] Although enrollment is lower than originally expected, Joseph Antos of the American Enterprise Institute has pointed out that this figure constitutes only 17 percent of the initial cost projections.[53] As a result, cost reductions can be attributable to competition as well as increased generic drug use.[54] These results are not surprising given that, compared with the rest of Medicare, the program has experienced significantly lower cost increases. Medicare Part D spending has grown at an annual rate of 2.8 percent from 2006 to 2012, while spending on traditional Medicare has grown an average of 4.9 percent annually during that same time period.[55]

Medicare Part D spending has grown at an annual rate of 2.8 percent from 2006 to 2012, while spending on traditional Medicare has grown an average of 4.9 percent annually during that same time period.

A number of studies in the peer-reviewed academic literature have also documented the success of Medicare Part D:

- A 2008 study published in the *American Journal of Managed Care* compared spending habits and utilization in the first year of Medicare Part D's implementation with the previous status quo. It found that the program significantly reduced seniors' out-of-pocket expenditures and increased use of prescription drugs.[56]

- A 2010 study published in *Research in Social and Administrative Pharmacy* examined seniors' medical expenditures before and after the institution of Medicare Part D. It found a significant decline in out-of-pocket expenditures and a notable uptake in utilization by those who previously had patterns of high spending on drugs.[57]

- A 2011 study published in *JAMA* found that Medicare Part D significantly reduced spending on non-medication items for Medicare beneficiaries.[58]

- A 2012 study published in *The American Economic Review* looked at consumer behavior in Medicare Part D plans in 2006 and 2007. The study found that Medicare Part D plans helped to reduce consumer spending by an average of $298 over time period examined by enabling patients to become more cost conscious about their choices. In particular, the study found that patients who had previously overspent in plans that did not satisfy them were more inclined to learn from past experiences and switch toward more cost-efficient Part D plans.[59]

Overall, the academic research has shown that Medicare Part D is associated with a reduction in out-of-pocket expenditures and increased use of covered medications, notably among individuals who previously lacked drug coverage.[60]

Some researchers have argued that seniors may lack a genuine understanding of cost-sharing requirements.[61] However, recent research has suggested that many seniors have begun to shop more prudently, such as by considering generic drugs instead of brand-name drugs.[62] Concerns about seniors not being able to make choices have also been present in non–Part D plans as well and should become increasingly less of an issue over time.[63]

Other research has expressed concern that Part D may not have gone far enough in covering prescription drugs for certain high-risk individuals.[64] These concerns are important, and policymakers should consider addressing coverage issues for these high-risk beneficiaries.

Although there is room for improvement, Medicare Part D illustrates the beneficial effects of competition in the health care marketplace. The competitive bidding process has been shown to successfully incentivize seniors to choose the lowest-cost plans.[65]

The FEHBP. Established by Congress in 1959, the Federal Employees Health Benefits Program serves over 8 million Americans by offering a vast array of competing private insurance plans to federal workers, including Members of Congress.[66] Federal employees can choose from a plethora of employer-subsidized plans, ranging from traditional fee-for-service plans to various types of managed care plans.

The FEHBP illustrates the effects of competition in health care. A number of changes to the program in the early 1980s diversified the choices of plans available to employees and retirees, allowing for lower premiums and greater cost sharing. The results were astounding—nearly a million employees and retirees switched plans.[67]

Additionally, a 1983 study by James Price, James Mays, and Gordon Trapnell published in the *Journal of Health Economics* looked at consumer choice as a result of changes in employer contributions in the early 1980s.[68] The authors found considerable sensitivity to employees' choice of plans. In particular, they found that employees were more inclined to choose plans that had larger "effective employer contributions," a covariate that served as a proxy for the average net benefit an enrollee would obtain by joining a particular plan after taking into account the employer premium contributions. The study thus illustrates that consumers of health insurance can be quite sensitive to prices.

Furthermore, for decades the FEHBP has controlled costs effectively, compared with the private sector as well as with traditional Medicare.[69] For example, a 1989 study by the Congressional Research Service found that the FEHBP controlled costs better than the private sector.[70] Several years later, Walton Francis compared costs of Medicare Part A and Part B to FEHBP premiums from 1975 to 1993. He found that although Medicare controlled costs better on paper (a 9.1 percent increase versus a 8.3 percent increase), FEHBP clearly outperformed Medicare after accounting for FEHBP benefit improvements.[71] A 2003 analysis found that the California Public Employees Retirement System (CalPERS), a similar program in California, was similarly successful in constraining costs compared with Medicare.

For decades the FEHBP has controlled costs effectively, compared with the private sector as well as with traditional Medicare.

In more recent years, some have argued that Medicare is now superior to the FEHBP in controlling costs;[72] however, these improvements are primarily due to recent competitive reforms to Medicare alongside budget cuts that have dampened Medicare's rate of growth.[73]

The FEHBP is by no means perfect. One problem is that the government's contribution to FEHBP plans increases as the cost of a plan increases. As a result, the government distorts the FEHBP market by generating an incentive for workers to select more expensive and, in some cases, unnecessary coverage.[74] Additionally, the program lacks appropriate risk-adjustment mechanisms that could reduce costs all around.[75] Regardless, the program demonstrates the potential of competitive dynamics to reduce costs in the health care marketplace.

Other Impediments to Competition

In addition to the third-party payment system, a number of other obstacles frustrate real competition in the private health care market. Some health care markets are too concentrated to properly promote meaningful competition, largely as a result of inadequate anti-trust policy.[76] Consequently, in many cases, there is no significant insurance market with enough "players" that can truly compete for patients to deliver maximum quality care at minimal cost. For example, a recent study by Laurie Bates, James Hilliard, and Rexford Santerre published in the *Southern Economic Journal* empirically demonstrated that health insurers possess market power in the insurance market.[77] They found that insurers wield this power by raising premiums and reducing the number of people with individually purchased insurance.

Several other studies have looked at competitive forces in health insurance markets. For example, a

recent study by Amanda Starc found a positive relationship between insurance concentration and premiums in the Medigap market.[78] Leemore Dafny published a study in the *American Economic Review* that looked at the interaction between insurance premiums and buyer profitability in the employer-based market.[79] She found a positive relationship between profitability and premiums that declines with the number of firms present in the market.

The Dafny study thus illustrates that competitive markets can help to reduce costs. More recent research has substantiated this finding. For example, a June 2012 study published in *Health Affairs* found that greater competition in health insurance markets is generally associated with lower premiums. Examining plans in the FEHBP, the study found higher premiums in markets with limited competition and lower premiums in markets with extremely high competition.[80]

A short 2010 discussion by Austin Frakt looked at the relationships among hospital concentration, insurer concentration, and health insurance premiums.[81] He argued that excesses in hospital concentration and insurer concentration lead to unnecessarily high health insurance premiums. At one extreme, if hospitals are overly concentrated, they can exert their clout to demand high prices from insurers. At the other extreme, if health insurance companies are overly concentrated, they can charge virtually any prices they desire. Either way, these high prices become manifested in higher insurance premiums for patients. However, if the relationship between hospital concentration and insurer concentration reaches an optimal level, then dominant insurers acquire monopoly-busting power, have the capacity to threaten network exclusion, and are consequently in a position to negotiate lower prices. This optimal level of concentration on both ends therefore results in lower premiums.

The studies mentioned in this section illustrate that the American health insurance market, although mostly private in nature, has a number of obstacles preventing competition from truly taking place.

Transforming How We Deliver Care

As noted, the extant literature suggests that consumer-oriented health care can result in higher quality and lower costs. However, what about the provider's perspective? Over the past several decades, providers have been required to operate on a fee-for-service basis in which they charge for test after test. This volume-based reimbursement system discourages the type of care necessary to prevent illnesses and encourage recovery. This fee-for-service system also unnecessarily increases health care costs by incentivizing providers to offer unnecessary tests.

For example, in 2001, the Duke Medical Center, where the late Senator Edward Kennedy chose to be treated for brain cancer,[82] created an innovative integrated care program for patients suffering from congestive heart failure.[83] In one year alone, the program saved more than $8,000 per enrollee. The program markedly improved patients' health, decreased hospital admissions, and reduced in-patient time when re-admittance was necessary. However, the Duke Medical Center lost money because the antiquated fee-for-service system paid the hospital simply for the volume of treatment of sick patients, not for helping them get better. As a result, helping patients recover more quickly was less profitable for the center.[84]

Value-based payment systems, also known as pay-for-performance systems, reward health care providers for fulfilling various performance metrics in quality and efficiency. The consistent rise in health care costs, coupled with a rapidly aging population, has made migrating toward a value-based system more imperative in recent years.

A number of studies in the academic literature have looked at recently instituted values-based payment systems:

- A 2006 study published in the *Journal of Healthcare Management* looked at the return on investment in migrating toward a value-based payment system for diabetes patients subscribing to a particular health plan. The study noted that the migration saved $2.4 million annually with an estimated return on investment of 1.6 percent to 2.5 percent.[85]

- In 2010, Judy Chen and several colleagues published research in the *American Journal of Managed Care* that compared the effectiveness of value-based payment systems on quality of care for diabetes patients. Their multivariate analysis statistically illustrated that migrating toward a value-based system improved quality of care.[86]

- Rachel Werner, Jonathan Koltsad, Elizabeth Stuart, and Daniel Polsky published a study in *Health Affairs* examining the effects of value-based payment systems in a vast array of hospitals. Their results suggested that migrating toward a value-based payment system most significantly affected hospitals that were offered larger incentives, faced little competition, and were in relatively strong financial condition. The authors suggest that pay-for-performance programs may therefore be most efficacious if they are used in a manner adapted to the particular circumstances of the hospitals involved.[87]

- A recent study published in *Health Services Research* argues that hospitals do not respond well to value-based payment incentives from the Centers for Medicare and Medicaid Services for Medicare patients. Critics may point to such studies as evidence that value-based systems are not effective, but these studies simply illustrate that value-based payment systems designed by government bureaucrats are far less likely to work.[88]

Clearly, value-based payment systems have the capability to improve the quality of health care. As we move away from the antiquated and inefficient fee-for-service system, consistent improvements in value-based payment systems will continue to permeate the health care marketplace. These systems will be much more cost-effective and will reward innovative and integrated approaches to care.[89]

Regrettably, certificate-of-need laws have made it difficult for new and innovative specialty hospitals to enter the market.[90] Certificate-of-need laws require those who want to acquire, expand, or create a hospital to demonstrate a legitimate "need" to federal and state bureaucrats before being issued a certificate to do so. As a result, these laws enable government bureaucrats to prop up existing, inefficient hospitals. This lack of competition has prevented value-based systems from realizing their full potential and becoming a pervasive force in the marketplace.

Managed Care

Started in the 1970s, managed care was one of the first attempts to instill competition in health care with the goal of reducing costs. The most common examples of managed care organizations are health maintenance organizations (HMOs), preferred provider organizations (PPOs), and independent practice organizations (IPAs). Managed care organizations operate by providing economic incentives for physicians and patients to select less costly forms of care. These organizations put together "teams of providers"—primary care physicians as well as specialists—to treat patients.

In principle, managed care should lead to better and more cost-effective care because managed care organizations involve medical teams and have an incentive to reduce costs by focusing on long-term health. However, the academic literature suggests only good, but not particularly great results for managed care. For example, a 1994 study published in *JAMA* found that managed care plans had mixed results when compared against indemnity plans.[91] The study found that HMO plans had lower rates of hospital admission, shorter duration of stays, less expensive uses of tests, and more frequent uses of preventive services. The study also found lower HMO enrollee satisfaction with services, but greater satisfaction with costs. A 2004 study published in *JAMA* found mixed effects of managed care for the elderly. Specifically, the study found that Medicare managed care performed better than traditional Medicare in offering preventive services, but that traditional Medicare was better with respect to other facets of care.[92] However, a recent study in *JAMA* found that Medicare managed care has been on average more cost-efficient than traditional Medicare.[93] Additionally, work published by the Medicare Payment Advisory Commission found that Medicare HMOs have been more cost-efficient than traditional Medicare.[94]

How to Improve Managed Care

Managed care organizations grew in the 1970s and 1980s. In the late 1990s, there was reasonable backlash to managed care by critics arguing that HMOs and other managed care plans were controlling costs by denying important services to patients or by providing low-quality care.[95] Some credited managed care with slowing down the growth of health insurance premiums in the late 1990s, but this success was short-lived when premiums started increasing again during the following decade.[96]

Academic criticism of managed care also began to grow. Kip Sullivan has argued that private HMO plans do not achieve any meaningful cost savings

over other plans.[97] Although managed care reduces out-of-pocket costs for consumers, he argues that HMOs do not affect total expenditures and payments by insurers. Potential reasons for this problem are:

- Consumers might increase use of care due to the lower degree of cost sharing associated with HMOs.[98]
- HMOs may be more expensive to administer.[99]
- HMOs may favorably select less costly healthy patients and avoid unhealthy patients.[100]

The primary reason for managed care's problems is that, with the exception of FEHBP and Medicare managed care, it is primarily offered though the employer-based health insurance system with very limited choices. With employers, not patients, as their customers, managed care organizations have one primary objective: reduce their customer's costs without significant regard for quality. One potential reason for this problem involves the tax advantage given to employer-based health insurance. If policymakers eliminated this distortion in the market, a greater proportion of Americans would shop around for their own insurance, including for managed care. Managed care organizations would then start working toward maximizing quality in addition to minimizing costs. If these organizations can do so effectively, they will continue to remain a viable presence in the marketplace.

Conclusion

The literature review presented here suggests that competition can indeed work in health care. Patients can be remarkably sensitive to prices in health care, just like in many other industries. Furthermore, as the literature suggests, consumer-driven health plans can be a great option that can make people more prudent and cost-conscious about their health care needs. Additionally, migrating toward a value-based payment system can enable care to become more integrated and cost-effective while improving quality. Although hampered with a number of problems over the past few decades, managed care may significantly improve in a consumer-driven market.[101] Policymakers will need to make certain reforms pertaining to taxes, certificate-of-need laws, risk adjustment mechanisms, and the enforcement of pertinent anti-trust laws to ensure a truly competitive health care market.

A number of scholars—including Regina Herzlinger and Michael Porter—have written extensively on transforming the American health care industry into a more competition-based market.[102] In a truly competitive market, consumers would have more options, and providers would be forced to deliver low-cost, high-quality care. With the right reforms, the health care industry could make great strides in offering integrated care, innovative treatments, and personalized medicine.[103] The resulting innovations will further America's position as the world's leader in medicine and health care for years to come.

*—**Kevin D. Dayaratna** is Research Programmer and Policy Analyst in the Center for Data Analysis at The Heritage Foundation.*

Endnotes

1. Meghan McCarthy, "$6,400 Question," *National Journal*, July 24, 2012, http://nationaljournal.com/columns/health-matters/-6-400-question-20120724 (accessed August 24, 2012).
2. Kenneth J. Arrow. "Uncertainty and the Welfare Economics of Medical Care," *American Economic Review,* Vol. 53 No. 5 (December 1963), pp. 941–973.
3. For a brief discussion of some of the academic literature on competition in health care, see Kevin Dayaratna, "Medicare Reform Debate: What Really Works in Health Care Competition," The Heritage Foundation, The Foundry, September 13, 2012, http://blog.heritage.org/2012/09/13/medicare-reform-debate-what-really-works-in-health-care-competition/. For a comprehensive review of the extensive academic literature on competition in health care, see Martin Gaynor and Robert Town, "Competition in Health Care Markets," in Mark V. Pauly, Thomas G. McGuire, and Pedro Pita Barros, eds., *Handbook of Health Economics*, Vol. 2 (Oxford, U.K.: North Holland, 2012), pp. 499–637.
4. Joseph P. Newhouse, *Free for All? Lessons from the RAND Health Insurance Experiment* (Cambridge, MA: Harvard University Press, 1996).
5. Jonathan Skinner and Elliott S. Fisher, "Reflections on Geographic Variations in U.S. Health Care," The Dartmouth Institute for Health Policy & Clinical Practice, updated May 12, 2010, http://www.dartmouthatlas.org/downloads/press/Skinner_Fisher_DA_05_10.pdf (accessed August 7, 2012).
6. McCarran–Ferguson Act, 15 U.S. Code §§ 1011–1015.
7. David Boaz, *Cato Handbook on Policy*, 7th ed. (Washington, DC: Cato Institute, 2009), pp. 174–175.
8. Michael D. Tanner, "Bad Medicine: A Guide to the Real Costs and Consequences of the New Health Care Law," Cato Institute, 2011, http://www.cato.org/bad-medicine/ (accessed September 14, 2012).
9. Stephen T. Parente et al., "Consumer Response to a National Marketplace for Individual Insurance," *Journal of Risk and Insurance*, Vol. 78, No. 2 (June 2011), pp. 389–411.
10. Goutam Chakraborty, Richard Ettenson, and Gary Gaeth, "How Consumers Choose Health Insurance," *Journal of Health Care Marketing*, Vol. 14, No. 1 (Spring 1994), pp. 21–33.
11. Adam Atherly, Bryan E. Dowd, and Roger Feldman, "The Effects of Benefits, Premiums, and Health Risk on Health Plan Choice in the Medicare Program," University of Minnesota, Division of Health Services Research and Policy, 2003; Jean Marie Abraham and Roger Feldman, "Taking Up or Turning Down: New Estimates of Household Demand for Employer-Sponsored Health Insurance," *Inquiry*, Vol. 47, No. 1 (Spring 2010), pp. 17–32; Austin B. Frakt and Steven D. Pizer, "Beneficiary Price Sensitivity in the Medicare Prescription Drug Plan Market," *Health Economics*, Vol. 19, No. 1 (January 2010), pp. 88–100; Anne Beeson Royalty and Neil Solomon, "Health Plan Choice: Price Elasticities in a Managed Competition Setting," *Journal of Human Resources*, Vol. 34, No. 1 (Winter 1999), pp. 1–41; and Bruce A. Strombom, Thomas Buchmueller, and Paul J. Feldstein, "Switching Costs, Price Sensitivity and Health Plan Choice," *Journal of Health Economics*, Vol. 21, No. 1 (January 2002), pp. 89–116.
12. Thomas Buchmueller and Paul Feldstein, "The Effect of Price on Switching Among Health Plans," *Journal of Health Economics*, Vol. 16, No. 2 (April 1997), pp. 231–247.
13. Jonathan D. Ketcham et al., "Sinking, Swimming, or Learning to Swim in Medicare Part D," *American Economic Review*, Vol. 102, No. 6 (October 2012), pp. 2639–2673.
14. Katherine M. Harris, "Can High Quality Overcome Consumer Resistance to Restricted Provider Access? Evidence from a Health Plan Choice Experiment," *Health Services Research*, Vol. 37, No. 3 (June 2002), pp. 551–571, and Gerard J. Wedig and Ming Tai-Seale, "The Effect of Report Cards on Consumer Choice in the Health Insurance Market," *Journal of Health Economics*, Vol. 21, No. 6 (November 2002), pp. 1031–1048.
15. Vijay Bhangale, "Marketing of Health Care Services in India: A Study on Factors Influencing Patients' Decision Making on Choice of a Hospital," *Journal of Management and Marketing In Health Care,* Vol. 4, No. 4 (November 2011), pp. 229–233; Joseph Boscarino and Steven R. Steiber, "Hospital Shopping and Consumer Choice," *Journal of Health Care Marketing*, Vol. 2, No. 2 (Spring 1982), pp. 15–23; and Harold S. Luft et al., "Does Quality Influence Choice of Hospital?" *JAMA*, Vol. 263, No. 21 (June 6, 1990), pp. 2899–2906.
16. Health Grades, http://www.healthgrades.com/ (accessed August 9, 2012), and Vitals, http://www.vitals.com/ (accessed August 9, 2012).
17. Medicare Prescription Drug, Improvement, and Modernization Act, Public Law 108–173.
18. Paul Fronstin, "Findings from the 2012 EBRI/MGA Consumer Engagement in Health Care Survey," Employee Benefit Research Institute *Issue Brief* No. 379, December 2012, http://www.ebri.org/pdf/briefspdf/EBRI_IB_12-2012_No379_CEHCS2.pdf (accessed April 17, 2013), and Greg Scandlen, "EBRI's Consumer Engagement Survey," *National Center for Policy Analysis*, http://healthblog.ncpa.org/ebris-consumer-engagement-survey/ (accessed January 23, 2012).
19. Stuart Butler, "Are Health Costs Really Slowing?" news@JAMA, January 16, 2013, http://newsatjama.jama.com/2013/01/16/jama-forum-are-health-costs-really-slowing/ (accessed February 18, 2013).
20. Melinda Beeuwkes Buntin et al., "Consumer-Directed Health Care: Early Evidence About Effects on Cost and Quality," *Health Affairs*, Vol. 25, No. 6 (November 2006), pp. w516–w530, http://content.healthaffairs.org/content/25/6/w516.full (accessed April 17, 2013); Anthony T. Lo Sasso et al., "Tales from the New Frontier: Pioneers' Experiences with Consumer-Driven Health Care," *Health Services Research*, Vol. 39, No. 4, part 2 (August 2004), pp. 1071–1090; and Gail R. Wilensky, "Consumer-Driven Health Plans: Early Evidence and Potential Impact on Hospitals," *Health Affairs*, Vol. 25, No. 1 (2006), pp. 174–185, http://content.healthaffairs.org/content/25/1/174.full (accessed April 17, 2013).

21. Cory Gusland et al., "Consumer-Driven Health Plan Effectiveness Case Study: State of Indiana," Mercer, May 20, 2010, http://www.in.gov/spd/files/CDHP_case_study.pdf (accessed August 1, 2012), and Kathryn Nix and Alyene Segner, "The Promise of Consumer-Directed Health Plans: Studies Show Success at Reducing Costs and Maintaining Quality," Heritage Foundation *Center for Policy Innovation Research Summary* No. 3, July 9, 2012, http://www.heritage.org/research/reports/2012/07/promise-of-consumer-directed-health-plans-studies-show-success-reducing-costs-maintaining-quality.
22. Dennis L. Kodner, "Consumer-Directed Services: Lessons and Implications for Integrated Systems of Care," *International Journal of Integrated Care*, Vol. 3 (April–June 2003), http://www.ijic.org/index.php/ijic/article/view/80/159 (accessed April 17, 2013).
23. J. Frank Wharam et al., "Emergency Department Use and Subsequent Hospitalizations Among Members of a High-Deductible Health Plan," *JAMA*, Vol. 297, No. 10 (March 14, 2007), pp. 1093–1102.
24. Adam Atherly, Bryan E Dowd, and Roger Feldman, "The Effects of Benefits, Premiums, and Health Risk on Health Plan Choice in the Medicare Program," *Health Services Research*, Vol. 39, No. 4, part 1 (August 2003), pp. 847–864, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361041/ (accessed April 17, 2013).
25. Roger Feldman et al., "Health Savings Accounts: Early Estimates of National Take-Up," *Health Affairs*, Vol. 24, No. 6 (November–December 2005), pp. 1582–1591, http://www.hsinetwork.com/18845353.pdf (accessed April 17, 2013).
26. Stephen T. Parente, Roger Feldman, and Song Chen, "Effects of a Consumer Driven Health Plan on Pharmaceutical Spending and Utilization," *Health Services Research*, Vol. 43, No. 5, part 1 (October 2008), pp. 1542–1556, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2653878/ (accessed April 17, 2013).
27. Kavita V. Nair, Vahram Ghushchyan, and Joseph J. Saseen, "Consumer-Driven Health Plans: Their Impact on Medical Utilization, Pharmacy Utilization, and Expenditures," *Journal of Health Care Finance*, Vol. 35, No. 1 (2008), pp. 1–12.
28. Jessica Greene, "Using Consumer Incentives to Increase Well-Child Visits Among Low-Income Children," *Medical Care Research and Review*, Vol. 68, No. 5 (October 2011), pp. 579–593.
29. Amelia M. Haviland et al., "Growth of Consumer-Directed Health Plans to One-Half of All Employer-Sponsored Insurance Could Save $57 Billion Annually," *Health Affairs*, Vol. 31, No. 5 (May 2012), pp. 1009–1015.
30. Anthony T. Lo Sasso, Mona Shah, and Bianca K. Frogner, "Health Savings Accounts and Health Care Spending," *Health Services Research*, Vol. 45, No. 4 (August 2010).
31. M. Beeuwkes Buntin et al., "Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans," *American Journal of Managed Care*, Vol. 17, No. 3 (March 2011), pp. 222–230.
32. Bijan J. Borah, Marguerite E. Burns, and Nilay D. Shah, "Assessing the Impact of High Deductible Health Plans on Health-Care Utilization and Cost: A Changes-in-Changes Approach," *Health Economics,* Vol. 20, No. 9 (September 2011), pp. 1025–1042.
33. Newhouse, *Free for All?;* Anna Dixon, Jessica Greene, and Judith Hibbard, "Do Consumer-Directed Health Plans Drive Change in Enrollees' Health Care Behavior?" *Health Affairs*, Vol. 27, No. 4 (July 2008), pp. 1120–1131, http://content.healthaffairs.org/content/27/4/1120.full (accessed April 18, 2013); Buntin et al., "Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans." and Margaret A. McManus et al., "Weighing the Risks of Consumer-Driven Health Plans for Families," *Pediatrics,* Vol. 117, No. 4 (April 2006), pp. 1420– 1424, http://pediatrics.aappublications.org/content/117/4/1420.full (accessed April 18, 2013).
34. Jessica Greene et al., "The Impact of Consumer-Directed Health Plans on Prescription Drug Use," *Health Affairs*, Vol. 27, No. 4 (July 2008), pp. 1111–1119, http://content.healthaffairs.org/content/27/4/1111.full (accessed April 18, 2013); Parente et al., "Effects of a Consumer Driven Health Plan on Pharmaceutical Spending and Utilization"; and Nair et al., "Consumer-Driven Health Plans."
35. Roger Feldman, Stephen T. Parente, and Jon B. Christianson, "Consumer-Directed Health Plans: New Evidence on Spending and Utilization," *Inquiry*, Vol. 44, No. 1 (Spring 2007), pp. 26-40.
36. Center for American Progress. "Myth vs. Fact: Consumer-Driven Health Plans," May 19, 2008, http://www.americanprogress.org/issues/healthcare/news/2008/05/19/4359/myth-vs-fact-consumer-driven-health-plans/ (accessed January 25, 2013).
37. Borah et al., "Assessing the Impact of High Deductible Health Plans on Health-Care Utilization and Cost."
38. J. Frank Wharam et al., "Cancer Screening Before and After Switching to a High-Deductible Health Plan," *Annals of Internal Medicine*, Vol. 148, No. 9 (May 2008), pp. 647–655.
39. Sheila K. Reiss et al., "Effect of Switching to a High-Deductible Health Plan on Use of Chronic Medications," *Health Services Research,* Vol. 46, No. 5 (October 2011), pp. 1382–1401.
40. Daniella Meeker et al., "Coverage and Preventive Screening," *Health Services Research*, Vol. 46, No. 1 (February 2011), pp. 173–184.
41. Amelia M. Haviland et al., "Growth of Consumer-Directed Health Plans to One-Half of All Employer-Sponsored Insurance Could Save $57 Billion Annually," *Health Affairs*, Vol. 31, No. 5 (May 2012), pp. 1009–1015, and Laura A. Tollen, Murray N. Ross, and Stephen Poor, "Risk Segmentation Related to the Offering of a Consumer-Directed Health Plan: A Case Study of Humana Inc.," *Health Services Research*, Vol. 39, No. 4, part 2 (August 2004), pp. 1167–1188.

42. Government Accountability Office, "Changes Improved Accuracy of Risk Adjustment for Certain Beneficiaries," GAO–12–52, December 9, 2011, http://www.gao.gov/products/GAO-12-52 (accessed September 14, 2012), and Edmund F. Haislmaier, "State Health Care Reform: A Brief Guide to Risk Adjustment in Consumer-Driven Health Insurance Markets," Heritage Foundation *Backgrounder* No. 2166, August 1, 2008, http://www.heritage.org/research/reports/2008/07/state-health-care-reform-a-brief-guide-to-risk-adjustment-in-consumerdriven-health-insurance-markets.
43. Haislmaier, "State Health Care Reform."
44. Regina E. Herzlinger, "Let's Put Consumers in Charge of Health Care," *Harvard Business Review*, July 2002, pp. 44–55.
45. Medicare Prescription Drug, Improvement, and Modernization Act, Public Law 108–173.
46. James. C. Capretta, "The Case for Competition in Medicare," Heritage Foundation *Backgrounder* No. 2605, September 12, 2011, http://www.heritage.org/research/reports/2011/09/the-case-for-competition-in-medicare.
47. Patricia Neuman and Juliette Cubanski, "Medicare Part D Update—Lessons Learned and Unfinished Business," *New England Journal of Medicine*, Vol. 361, No. 4 (July 23, 2009), pp. 406–414.
48. NBC News, "Transcript to the CNBC/WSJ Democratic Presidential Debate," September 25, 2003, http://www.msnbc.msn.com/id/3088203/t/transcript-cnbcwsj-democratic-presidential-debate/#.UKcRKYe7OSo (accessed November 16, 2012).
49. Henry J. Kaiser Family Foundation, "The Medicare Prescription Drug Benefit," *Fact Sheet*, November 2012, http://www.kff.org/medicare/upload/7044-13.pdf (accessed November 16, 2012).
50. PR Newswire, "Medicare Part D Continues to Earn Strong Marks from America's Seniors," November 12, [2009], http://www.prnewswire.com/news-releases/medicare-part-d-continues-to-earn-strong-marks-from-americas-seniors-69867642.html (accessed April 18, 2013).
51. Drew Gonshorowski, "Medicare Part D Proves That Competition Lowers Health Care Spending," Heritage Foundation, The Foundry, June 6, 2012, http://blog.heritage.org/2012/06/06/medicare-part-d-proves-that-competition-lowers-health-care-spending/.
52. Jack Hoadley, "Medicare Part D Spending Trends: Understanding Key Drivers and the Role of Competition," Kaiser Family Foundation *Issue Brief,* May 2012, http://www.kff.org/medicare/8308.cfm (accessed April 18, 2013), and Edwin Park and Matt Broaddus, "Lower-Than-Expected Medicare Drug Costs Mostly Reflect Lower Enrollment and Slowing of Overall Drug Spending, Not Reliance on Private Plans," Center on Budget and Policy Priorities, May 14, 2012, http://www.cbpp.org/cms/index.cfm?fa=view&id=3775 (accessed November 16, 2012).
53. Joseph Antos, "What Does Medicare Part D Say About the Ryan Plan?" Real Clear Markets, June 15, 2011, http://www.realclearmarkets.com/articles/2011/06/15/what_does_medicare_part_d_say_about_the_ryan_plan_99074.html (accessed November 16, 2012).
54. Dana P. Goldman and Geoffrey F. Joyce, "Medicare Part D: A Successful Start with Room for Improvement," *JAMA*, Vol. 299, No. 16 (April 23/30, 2008), pp. 1954–1955.
55. Gonshorowski, "Medicare Part D Proves That Competition Lowers Health Care Spending."
56. Jonathan D. Ketcham and Kosali I. Simon, "Medicare Part D's Effects on Elderly Drug Costs and Utilization," *American Journal of Managed Care*, Vol. 14, No. 11 (November 2008), pp. SP14–SP21, http://www.ajmc.com/publications/issue/2008/2008-11-vol14-n11SP/Nov08-3702pSP14-SP21 (accessed April 18, 2013).
57. David A. Mott et al., "Effects of Medicare Part D on Drug Affordability and Use: Are Seniors with Prior High Out-of-Pocket Drug Spending Affected More?" *Research in Social and Administrative Pharmacy*, Vol. 6, No. 2 (June 2010), pp. 90–99.
58. J. Michael McWilliams, Alan M. Zaslavsky, and Haiden A. Huskamp, "Implementation of Medicare Part D and Nondrug Medical Spending for Elderly Adults with Limited Prior Drug Coverage," *JAMA*, Vol. 306, No. 4 (July 27, 2011), pp. 402–409, http://jama.jamanetwork.com/article.aspx?articleid=1104150 (accessed April 18, 2013).
59. Ketcham et al., "Sinking, Swimming, or Learning to Swim in Medicare Part D."
60. Sebastian Schneewiss et al. "The Effect of Medicare Part D Coverage on Drug Use and Cost Sharing Among Seniors Without Prior Drug Benefits," *Health Affairs*, Vol. 28, No. 2 (March/April 2009), pp. w305–w316, http://content.healthaffairs.org/content/28/2/w305.full (accessed April 18, 2013); Frank R. Lichtenberg and Shawn X. Sun, "The Impact of Medicare Part D on Prescription Drug Use by the Elderly," *Health Affairs*, Vol. 26 No. 6 (November 2007), pp. 1735–1744, http://content.healthaffairs.org/content/26/6/1735.full (accessed April 18, 2013); and Wesley Yin et al., "The Effect of the Medicare Part D Drug Benefit on Drug Utilization and Expenditures," *Annals of Internal Medicine*, Vol. 148, No. 3 (February 5, 2008), pp. 169–177, http://annals.org/article.aspx?articleid=739167 (accessed April 18, 2013).
61. John Hsu et al., "Medicare Beneficiaries' Knowledge of Part D Prescription Drug Program Benefits and Responsiveness to Drug Costs," *JAMA*, Vol. 299, No. 16 (April 23/30, 2008), pp. 1929–1936, http://jama.jamanetwork.com/article.aspx?articleid=181814 (accessed April 18, 2013).
62. Gonshorowski, "Medicare Part D Proves that Competition Lowers Health Care Spending," and Neuman and Cubanski, "Medicare Part D Update."
63. Goldman and Joyce, "Medicare Part D."
64. Jeanne M. Madden et al., "Cost-Related Medication Nonadherence and Spending on Basic Needs Following Implementation of Medicare Part D," *JAMA*, Vol. 299, No. 16 (April 23/30, 2008), pp. 1922–1928, http://jama.jamanetwork.com/article.aspx?articleid=181815 (accessed April 18, 2013).
65. Goldman and Joyce, "Medicare Part D."

66. Robert E. Moffit, "Consumer Choice in Health: Learning from the Federal Employee Health Benefit Program," Heritage Foundation *Backgrounder* No. 878, November 9, 1992, http://www.heritage.org/research/reports/1992/02/consumer-choice-in-health-learning-from-the-federal-employee-health-benefits-program.
67. U.S. Office of Personnel Management, "Feds Health Benefits Changes Save Taxpayers and Employees Nearly $2 Billion," October 17, 1983.
68. James R. Price, James W. Mays, Gordon R. Trapnell, "Stability in the Federal Employees Health Benefits Program," *Journal of Health Economics,* Vol. 2, No. 3 (December 1983), pp. 207–224.
69. Walton Francis, *Putting Medicare Consumers in Charge: Lessons from the FEHBP* (Washington, DC: AEI Press, 2009).
70. U.S. House of Representatives, Committee on Post Office and Civil Service, *The Federal Employees Health Benefits Program: Possible Strategies for Reform* (Washington, DC: U.S. Government Printing Office, 1989).
71. Walton Francis, "The Political Economy of the Federal Employees Health Benefits Program," in Robert B. Helms, ed., *Health Policy Reform: Competition and Controls* (Washington, DC: AEI Press, 1993), pp. 269–307.
72. Francis, *Putting Medicare Consumers in Charge.*
73. Ibid. http://www.nejm.org/doi/full/10.1056/NEJMsa0807998#t=articleTop (accessed April 18, 2013).
74. Capretta, "The Case for Competition in Medicare."
75. Robert E. Moffit and Kathryn Nix. "Transforming Medicare into a Modern Premium Support System: What Americans Should Know," Heritage Foundation *WebMemo* No. 3227, April 15, 2011, http://www.heritage.org/research/reports/2011/04/how-to-transform-medicare-into-a-modern-premium-support-system.
76. Barak D. Richman, "Concentration in Health Care Markets: Chronic Problems and Better Solutions," American Enterprise Institute, June 2012, http://www.aei.org/papers/health/healthcare-reform/concentration-in-health-care-markets-chronic-problems-and-better-solutions/ (accessed April 18, 2013).
77. Laurie J. Bates, James I. Hilliard, and Rexford E. Santerre, "Do Health Insurers Possess Market Power?" *Southern Economic Journal*, Vol. 78, No. 4 (April 2012), pp. 1289–1304.
78. Amanda Starc, "Insurer Pricing and Consumer Welfare: Evidence from Medigap," unpublished manuscript, Harvard University, 2010.
79. Leemore Dafny, "Are Health Insurance Markets Competitive?" *American Economic Review*, Vol. 100, No. 4 (September 2010), pp. 1399–1431.
80. Timothy D. McBride et al.,"Federal Employees Health Program Experiences Lack of Competition in Some Areas, Raising Cost Concerns for Exchange Plans," *Health Affairs*, Vol. 31, No. 6 (June 2012), pp. 1321–1328.
81. Austin Frakt, "The Future of Health Care Costs: Hospital-Insurer Balance of Power," National Institute for Health Care Management *Expert Voices*, November 2010, http://nihcm.org/component/content/article/407 (accessed April 18, 2013).
82. Matt Viser and Michael Levenson, "Kennedy's Brain Tumor Surgery Deemed a Success" Boston.com, June 2, 2008, http://www.boston.com/news/local/breaking_news/2008/06/sen_kennedy_to.html (accessed July 31, 2012).
83. David J. Whellan et al., "The Benefit of Implementing a Heart Failure Disease Management Program," *Archives of Internal Medicine*, Vol. 161, No. 18 (October 8, 2001), pp. 2223–2228, http://archinte.jamanetwork.com/article.aspx?articleid=649163 (accessed April 18, 2013).
84. Regina E. Herzlinger, "Consumer-Driven Health Care: Freeing Providers to Innovate," *HFM*, March 2004, pp. 66–68, http://www.hfma.org/Content.aspx?id=1936 (accessed April 18, 2013).
85. Kathleen Curtin et al., "Return on Investment in Pay for Performance: A Diabetes Case Study," *Journal of Healthcare Management*, Vol. 51, No. 6 (November/December 2006), pp. 365–374.
86. Judy Y. Chen et al., "The Effect of a PPO Pay-for-Performance Program on Patients with Diabetes," *American Journal of Managed Care*, Vol. 16, No. 1 (January 2010), pp. e11–e19.
87. Rachel M. Werner et al., "The Effect of Pay-for-Performance in Hospitals: Lessons for Quality Improvement," *Health Affairs*, Vol. 30 No. 4 (April 2011), pp. 690–698.
88. Lauren Hersch Nicholas, Justin B. Dimick and Theodore J. Iwashyna, "Do Hospitals Alter Patient Care Effort Allocations Under Pay-for-Performance?" *Health Services Research*, Vol. 46, No. 1 (February 2011).
89. Herzlinger, "Let's Put Consumers in Charge of Health Care."
90. Timothy Sandefur, "CON Job," *Regulation*, Summer 2011, pp. 42-46, http://www.cato.org/sites/cato.org/files/serials/files/regulation/2011/8/regv34n2-1.pdf (accessed April 24, 2012).
91. Robert H. Miller and Harold S. Luft, "Managed Care Plan Performance Since 1980: A Literature Analysis," *JAMA*, Vol. 271, No. 19 (May 18, 1994), pp. 1512–1519.
92. Bruce E. Landon et al., "Comparison of Performance of Traditional Medicare vs Medicare Managed Care," *JAMA*, Vol. 291, No. 14 (April 14, 2004), pp. 1744–1752, http://jama.jamanetwork.com/article.aspx?articleid=198537 (accessed April 18, 2013).
93. Zirui Song, David M. Cutler, and Michael E. Chernew, "Potential Consequences of Reforming Medicare into a Competitive Bidding System," *JAMA*, Vol. 308, No. 5 (August 1, 2012), pp. 459–460.

94. Medicare Payment Advisory Commission, *A Data Book: Health Care Spending and the Medicare Program*, June 2012, http://www.medpac.gov/documents/Jun12DataBookEntireReport.pdf (accessed January 25, 2013).
95. Robert J. Blendon et al., "Understanding the Managed Care Backlash," *Health Affairs*, Vol. 17, No. 4 (July 1998), pp. 80–94.
96. Michael F. Cannon and Michael D. Tanner, *Healthy Competition: What's Holding Back Health Care and How to Free It*, revised ed. (Washington, DC: The Cato Institute, 2007), p. 139.
97. Kip Sullivan, "On the 'Efficiency' of Managed Care Plans," *Health Affairs*, Vol. 19, No. 4 (July 2000), pp. 139–148, http://content.healthaffairs.org/content/19/4/139.full.pdf+html (accessed April 18, 2013).
98. Jaeun Shin and Sangho Moon, "Do HMO Plans Reduce Expenditure in the Private Sector?" *Economic Inquiry*, Vol. 45, No. 1 (January 2007), pp. 82–99.
99. Sullivan, "On the 'Efficiency' of Managed Care Plans."
100. Ibid.
101. If managed care cannot be improved, then it will be weeded out of the consumer-driven market.
102. Regina Herzlinger, *Market Driven Health Care: Who Wins, Who Loses in the Transformation of America's Largest Service Industry* (New York: Perseus Books, 1997), and Michael E. Porter and Elizabeth Olmsted Teisberg. *Redefining Health Care: Creating Value-Based Competition on Results* (Boston: Harvard Business School Press, 2006).
103. Herzlinger, "Let's Put Consumers in Charge of Health Care."