

# What to Do about Health-Care Markets? Policies to Make Health-Care Markets Work

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## MISSION STATEMENT

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth.

We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers — based on credible evidence and experience, not ideology or doctrine — to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that “prudent aids and encouragements on the part of government” are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.





# What to Do about Health-Care Markets? Policies to Make Health-Care Markets Work

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**MARCH 2020**

This policy proposal is a proposal from the author(s). As emphasized in The Hamilton Project's original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. The author(s) are invited to express their own ideas in policy papers, whether or not the Project's staff or advisory council agrees with the specific proposals. This policy paper is offered in that spirit.

**BROOKINGS**

# Abstract

The U.S. health-care system is based on markets, but those markets do not perform as well as they could or should. One of the major reasons for this is lack of competition. There has been a great deal of consolidation in health-care markets over time, and that has resulted in higher prices and has not been offset by gains in quality, reductions in cost, or other improvements. There are many markets where competition can occur and be effective, but policies are needed to enable and support that competition. However, there are a number of markets in the United States where there is little competition and little prospect for that to change anytime soon. I therefore propose three broad areas for policies to improve the functioning of health-care markets: (1) Reduce or eliminate policies that encourage consolidation or that impede entry and competition. (2) Strengthen antitrust enforcement so that federal and state antitrust enforcement agencies can act effectively to prevent and remove harms to competition. (3) Create an agency responsible for monitoring and oversight of health-care markets, and give that agency the authority to flexibly intervene when markets are not working.

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# Introduction

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**H**ealth care is a very large and economically important industry. Health-care spending is now over \$3.5 trillion and accounts for approximately 18 percent of GDP—nearly one-fifth of the entire U.S. economy (Martin et al. 2019). In turn, hospital and physician services are a large part of the health-care system. In 2017 hospital care alone accounted for almost one-third of total health spending and 5.9 percent of GDP—roughly twice the size of automobile manufacturing, agriculture, or mining, and larger than all manufacturing sectors except food and beverage and tobacco products, which is approximately the same size. Physician services comprise 3.6 percent of GDP (Martin et al. 2019). The net cost of health insurance—current-year premiums minus current-year medical benefits paid—was 1.2 percent of GDP in 2017.<sup>1</sup>

All of these shares have risen dramatically over the past 30 years. In 1980 hospitals and physicians accounted for 3.6 percent and 1.7 percent of U.S. GDP, respectively, while the net cost of health insurance in 1980 was 0.34 percent (Martin et al. 2011).

Of course, health care is important not only because of its size: Health-care services can save lives or dramatically affect the quality of life, thereby substantially improving well-being and productivity.

As a consequence, the functioning of the health-care sector is vitally important. A well-functioning health-care sector is an asset to the economy and improves quality of life for the citizenry. By the same token, problems in the health-care sector act as a drag on the economy and impose large burdens on individuals.

The U.S. health-care system is based on markets. The vast majority of health care is privately provided (with some exceptions, such as public hospitals, the U.S. Department of Veterans Affairs, and the Indian Health Service) and over half of health care is privately financed (Martin et al. 2019). As a consequence, the health-care system will work only as well as the markets that underpin it. If those markets function poorly, the result is health care that is not as good as it could be and that costs more than it should. Moreover, attempts at reform will not prove successful if they are built on top of dysfunctional markets.

There is widespread agreement that these markets do not work as well as they could, or should. Prices are high and rising (National Academy of Social Insurance 2015; New York State Health Foundation 2016; Rosenthal 2017), they vary in seemingly incoherent ways, there are egregious pricing practices like surprise billing (Cooper and Scott Morton 2016; Garmon and Chartock 2017; Kliff 2019; Rosenthal 2017), there are serious concerns about the quality of care (Institute of Medicine 2001; Kessler and McClellan 2000; Kohn, Corrigan, and Donaldson 1999), and the system is sluggish and unresponsive, lacking the innovation and dynamism that characterize much of the rest of our economy (Chin et al. 2015; Cutler 2010; Herzlinger 2006).

One of the reasons for this is lack of competition (Aaron et al. 2019; Azar, Mnuchin, and Acosta 2018; Gee and Gurwitz 2018; Roy 2019). The research evidence shows that hospitals and doctors who face less competition charge higher prices to private payers, without accompanying gains in efficiency or quality. Research shows the same is true for insurance markets. Insurers who face less competition charge higher premiums, and could pay lower prices to providers. Moreover, the evidence also shows that lack of competition can cause serious harm to the quality of care received by patients.

As documented below, there has been a tremendous amount of consolidation among health-care providers. Consolidation has also been occurring among health insurers. It is important to be clear that consolidation can be either beneficial or harmful (or neutral). Consolidation can bring efficiencies: It can reduce inefficient duplication of services, allow firms to combine to achieve efficient size, or facilitate investment in quality or efficiency improvements. Successful firms can also expand by acquiring others. If firms get larger by being better at giving consumers what they want or driving down costs so their goods are cheaper, that is a good thing (big does not equal bad), as long as they then do not engage in actions to attempt to limit competition. On the other hand, consolidation can reduce competition and enhance market power and thereby lead to increased prices or reduced quality. Moreover, firms that have acquired market power have strong incentives to maintain or enhance it. This leads to the potential for anticompetitive conduct by firms that have acquired dominant positions through consolidation.

Increased health-care prices, due to lack of competition or other factors, lead to increased costs and burdens on consumers. Most of the recent increase in private health-care spending (74 percent) is due to increased prices, as shown by figure 1.

It is important to recognize that although most health-care consumers are heavily insured and thus do not directly pay for most of the cost of the care they receive, the burden of higher provider prices falls heavily on individuals, not simply on insurers or employers. Health care is not like commodity products such as milk or gasoline. If the price of milk or gasoline goes up, consumers experience the increased price directly when they purchase these products. However, even though individuals with private employer-provided health insurance only pay a small portion of provider fees directly out of their own pockets, they ultimately pay for increased prices: Insurers facing higher provider prices increase their premiums to employers. Employers then pass those increased premiums on to their workers, either in the form of lower wages (or smaller wage increases) or reduced benefits (greater premium sharing or less extensive coverage, including the loss of coverage) (Anand 2017; Baicker and Chandra 2006; Bhattacharya and Bundorf 2005; Currie and Madrian 2000; Emanuel and Fuchs 2008; Gruber 1994).

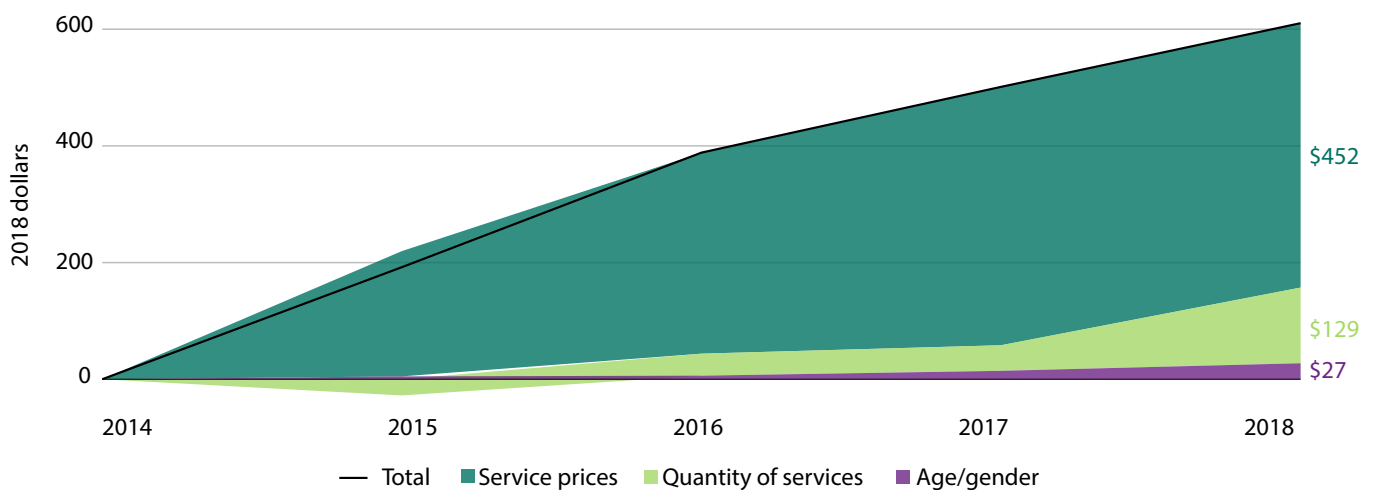
Figures 2 and 3 illustrate the growing burden of health-care spending borne by individuals and households. Figure 2

shows that workers' share of health insurance premiums has grown much faster than their wages. Workers' contributions to family health insurance premiums grew 259 percent from 1999 to 2018, while nominal average hourly earnings for production and nonsupervisory workers grew by only 68 percent.

The burden of private health-care spending on U.S. households has been growing, and is taking up an increasingly larger share of household spending, and has overtaken and exceeded any increases in pay for many workers. Figure 3 illustrates that middle-income families' spending on health care increased 6 percent between 2007 and 2013, crowding out spending on other goods and services, including food, housing, and clothing. Fringe benefits for workers, chief among which is health care, increased as a share of workers' total compensation over this same period, growing from 12 to 14.5 percent, while wages stayed flat (see Monaco and Pierce 2015, table 1).

The poor functioning of health-care markets due to lack of competition is a pressing issue that urgently needs to be addressed. In what follows I explain how competition works in health care, document trends in health-care consolidation, summarize the research evidence on competition generally and on the impacts of consolidation specifically, then propose policies that will help address the shortcomings of health-care markets and make them work.

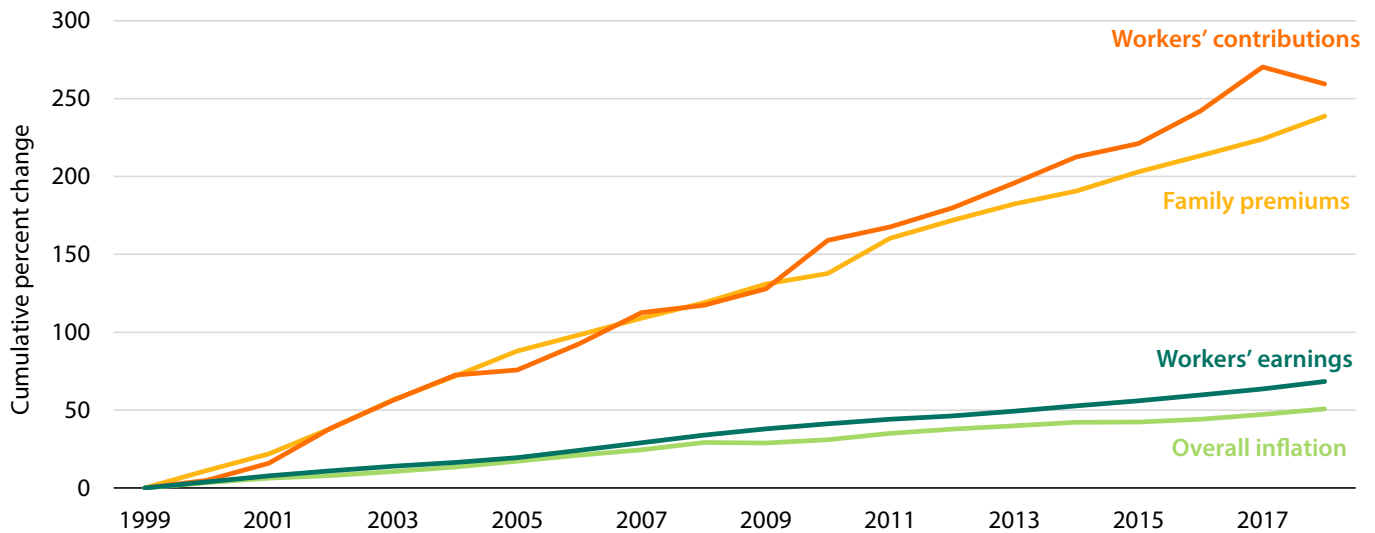
**FIGURE 1.**  
Drivers of Growth in Health-Care Spending per Person for the Privately Insured, 2014–18



Source: Health Care Cost Institute 2020.

FIGURE 2.

### Growth in Overall Inflation, Workers' Earnings, Family Premiums, and Workers' Contributions, 1999–2018

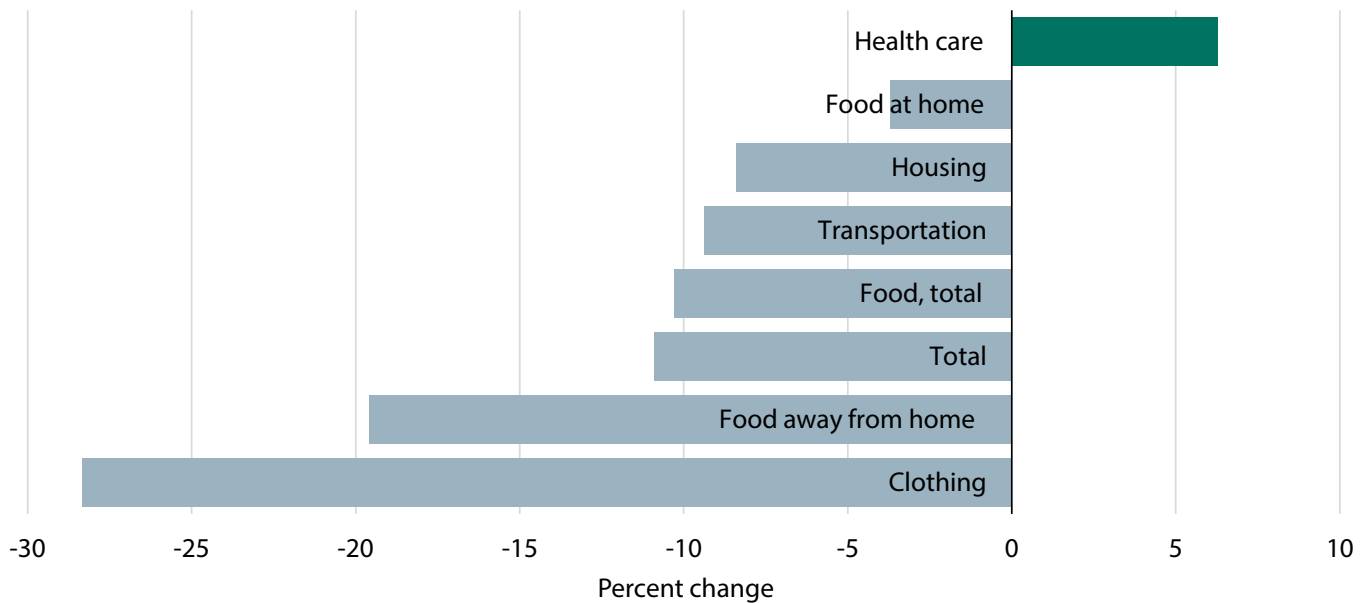


Source: Kaiser Family Foundation 2019; Bureau of Labor Statistics (BLS) 1999–2019a, 1999–2019b; author's calculations.  
 Note: Overall inflation is the annual average of the CPI-U.



FIGURE 3.

### Percent Change in Middle-Income Households' Spending on Health Care and Other Basic Needs, 2007–13



Source: BLS 2007–13; author's calculations.





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# Background

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## HOW COMPETITION WORKS IN HEALTH CARE

One of the first things to understand about health care is the demand for health insurance, and in particular how individuals relate to the health-care system. Health and the expense of treating ill health are both uncertain. Serious illness is (fortunately) rare, but treating serious illness is typically very expensive. This means that, over the course of a year, most people will be quite healthy and consequently have low health expenses, while there will be a few people who are seriously ill and have very high health expenses. As a consequence, a small number of people account for the majority of health spending in any given year (see figure 4). For example, the curve in the figure shows that 95 percent of the population accounts for 50 percent of health-care expenditures. In other words, 5 percent of the population incurs 50 percent of all health-care expenditures in any given year.

The uncertainty associated with health and the potentially high cost of treatment mean that—without adequate insurance—individuals are subject to serious financial risk. The average health-care expenditure per person for those in the top 1 percent of spending was \$110,003, and even for those in the top half of the distribution average spending was a hefty \$9,735 (Mitchell 2019). To put this in perspective, 44 percent of Americans report that they would tap sources other than liquid savings to cover an unexpected emergency expense of \$400 (Board of Governors of the Federal Reserve System 2017).

This potential exposure to serious financial risk associated with ill health means that individuals benefit from health insurance.<sup>2</sup> While health insurance is important and highly beneficial, it reduces the incentives for individuals to seek out health-care providers with lower prices, since individuals' costs are partly or wholly covered by health insurance. In particular, individuals with high medical expenses are very likely to have their costs heavily covered by health insurance (as they should, since insurance should insure against catastrophic financial losses), and thus face no difference in their own expenses when choosing between providers who charge higher and lower prices. As we have just seen, spending by these individuals constitutes the bulk of U.S. health-care spending. As a result, most health-care spending

is incurred by individuals who have no reason to pay attention to differences in prices between health-care providers.<sup>3</sup>

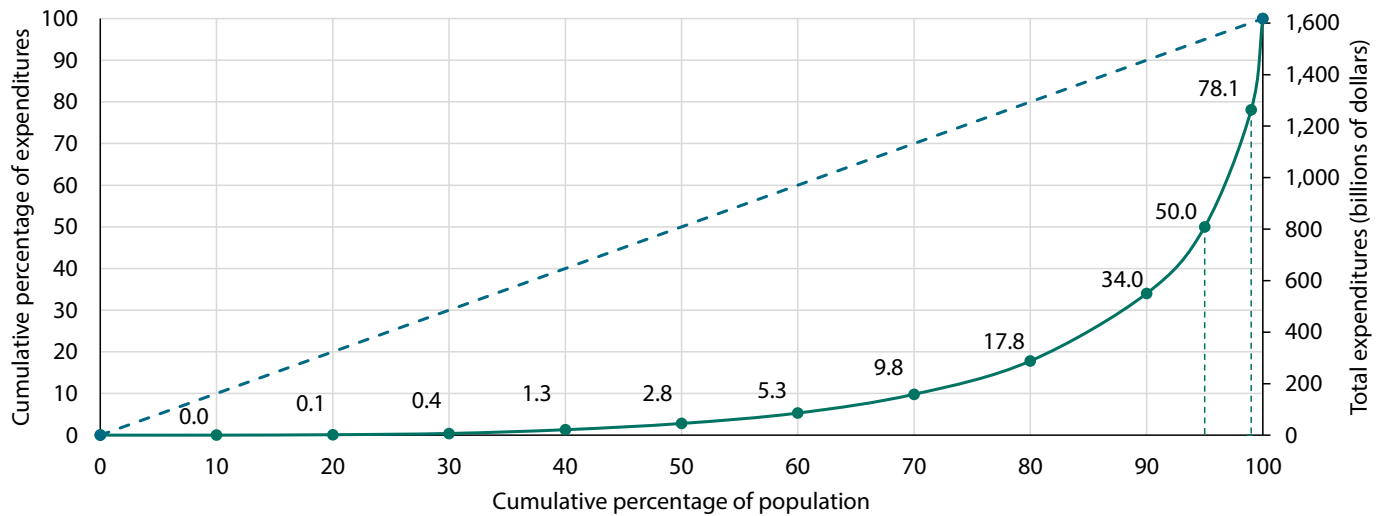
This implies that for the most part individuals are not going to be shopping among providers on the basis of price.<sup>4</sup> However, insurance providers do have the incentive and ability to compare providers on the basis of cost, and by doing so can benefit consumers. To the extent that health insurance markets are competitive, cost savings in the form of lower prices obtained from providers are passed on to consumers through lower insurance premiums. Health insurers, therefore, are the entities that are the primary drivers of competition in health-care markets. In turn, competition in health insurance markets is driven by employers seeking better deals on the health insurance they sponsor for their employees, and by individuals purchasing insurance themselves (e.g., through the health insurance marketplaces of the Patient Protection and Affordable Care Act of 2010 [Affordable Care Act]).

Competition in health care occurs via two-stage competition (see, e.g., Dranove and Satterthwaite 2000; Gaynor, Ho, and Town 2015; Gowrisankaran, Nevo, and Town 2015; Vistnes 2000). In the first stage, insurers announce that they will include some (but not necessarily all) providers in their network that are important to their enrollees and that give them the best prices, quality, and service. Providers then compete to be included in insurers' networks. When insurers can choose among numerous providers that consumers regard as decent alternatives to each other, those providers have an incentive to compete harder (offering lower prices and better quality) to be included in insurers' networks. Conversely, if insurers do not have a good alternative to a particular provider, then that provider does not have to compete hard to be included in a network and can command higher prices (or provide lower quality).

In the second stage, providers in a particular insurer's network compete to attract enrollees. As stated previously, since enrollees are heavily insured, they will be responsive primarily to quality, services offerings, locations, and so on, and not primarily to prices. Therefore, price competition occurs in the first stage, when providers compete to be included in insurers' networks.

FIGURE 4.

## Distribution of Health-Care Expenditures in the U.S. Population



Source: Agency for Healthcare Research and Quality 2019. Data are for 2016.

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There are some key points to note about how competition works in health care. First, individual consumers in health care do not drive price competition in health-care markets. One of the key reasons (but not the only reason) for this is that they are insured against large health-care costs (as they should be). Second, that does not mean that there is no competition in health-care markets. In fact, there is competition, and it can be fierce, but it is driven by health insurers and not by individual consumers. Third, consumers could play a greater role as active shoppers in health care, but the extent to which this is possible is limited. Fourth, competition in the health insurance market determines the extent to which lower prices that insurers obtain from providers get passed on to consumers via lower premiums.

### TRENDS IN HEALTH-CARE CONSOLIDATION

There has been a tremendous amount of consolidation in the health-care industry over the past 20–30 years. A recent paper by Fulton (2017) documents these trends and shows high and increasing concentration in U.S. hospital, physician, and insurance markets. Figure 5 illustrates these trends from 2010 to 2016, using the Herfindahl-Hirschman Index (HHI) measure of market concentration.<sup>5</sup> For a point of reference, the U.S. antitrust enforcement agencies’ horizontal merger guidelines classify markets with HHIs above 2,500 as highly concentrated (U.S. Department of Justice [DOJ] and Federal Trade Commission [FTC] 2010). Such high levels of concentration are considered to be suggestive of limited competition and can provoke antitrust scrutiny when a merger would result in such a level.<sup>6</sup> As can be seen in figure 5, average HHIs for hospital markets in particular, but also

for specialist physicians and insurers, are all well beyond the level the antitrust enforcement agencies consider highly concentrated, and HHIs for primary care physician markets have been approaching that level.

### Hospitals

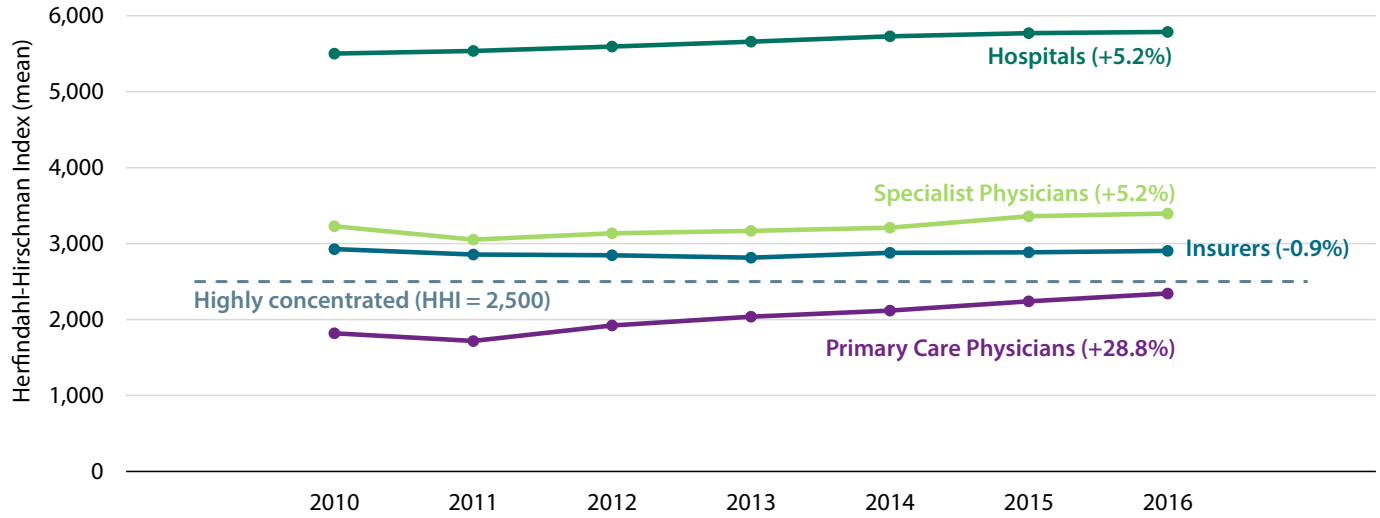
The American Hospital Association documents 1,577 hospital mergers from 1998 to 2017, with 456 occurring over the five years from 2013 to 2017. Figure 6 illustrates the number of hospital mergers from 1998 to 2017. A trade publication documents an additional 90 announced hospital mergers in 2018 (Singh 2019).

While some of these mergers might have little or no impact on competition, many are between hospitals located close to each other. Hospitals in close proximity are potentially strong competitors, since patients do not travel far for hospital care. The fact that many mergers are between close potential competitors is cause for concern, especially given that hospital markets are already highly concentrated. Figure 7 shows that almost half of the hospital mergers occurring from 2010 to 2012 were between hospitals in the same area. Separately, Cooper et al. (2019) find that 30 percent of hospital mergers from 2007 to 2011 were between hospitals within 15 miles of each other, and 12 percent of mergers were between hospitals within 5 miles of each other. Moreover, as indicated below, recent evidence indicates that even mergers between hospitals in different locations can lead to higher prices.

As a result of this consolidation, the majority of hospital markets are highly concentrated, and many areas of the country are dominated by one or two large hospital systems

FIGURE 5.

## Market Concentration for Hospitals, Specialist Physicians, Insurers, and Primary Care Physicians, 2010–16



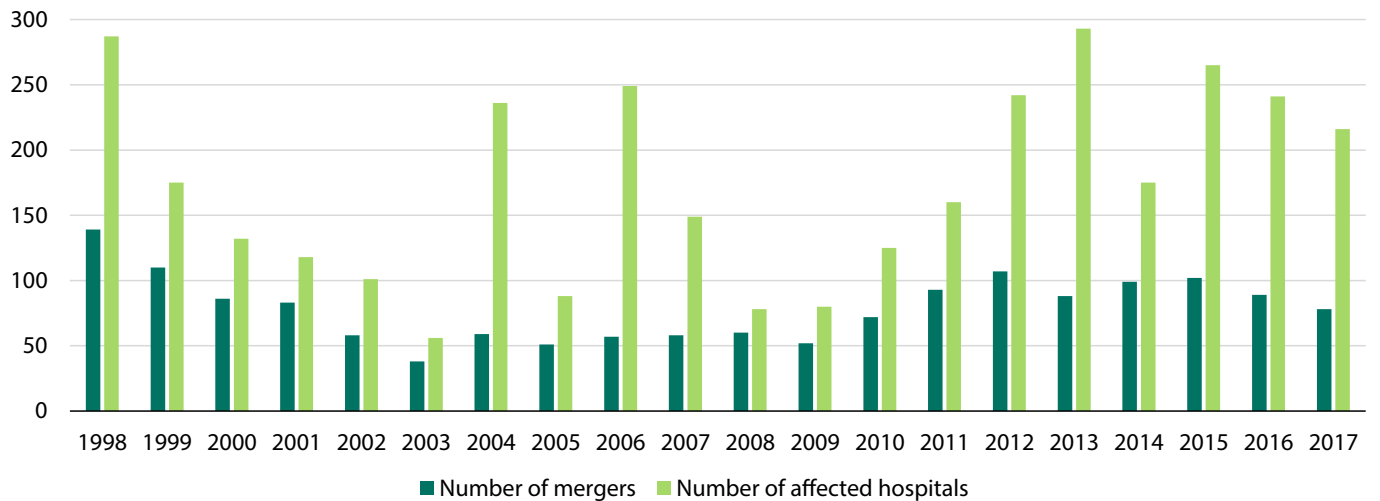
Source: Fulton 2017.

Note: The Herfindahl-Hirschman Index (HHI) is a measure of market concentration. The high concentration threshold is based on the U.S. Department of Justice (DOJ) and Federal Trade Commission's (FTC's) Horizontal Merger Guidelines. Each HHI value is the sector-specific mean of metropolitan statistical areas values. Percentages in parentheses show growth in HHI from 2010 to 2016.



FIGURE 6.

## Number of Hospital Mergers, 1998–2017

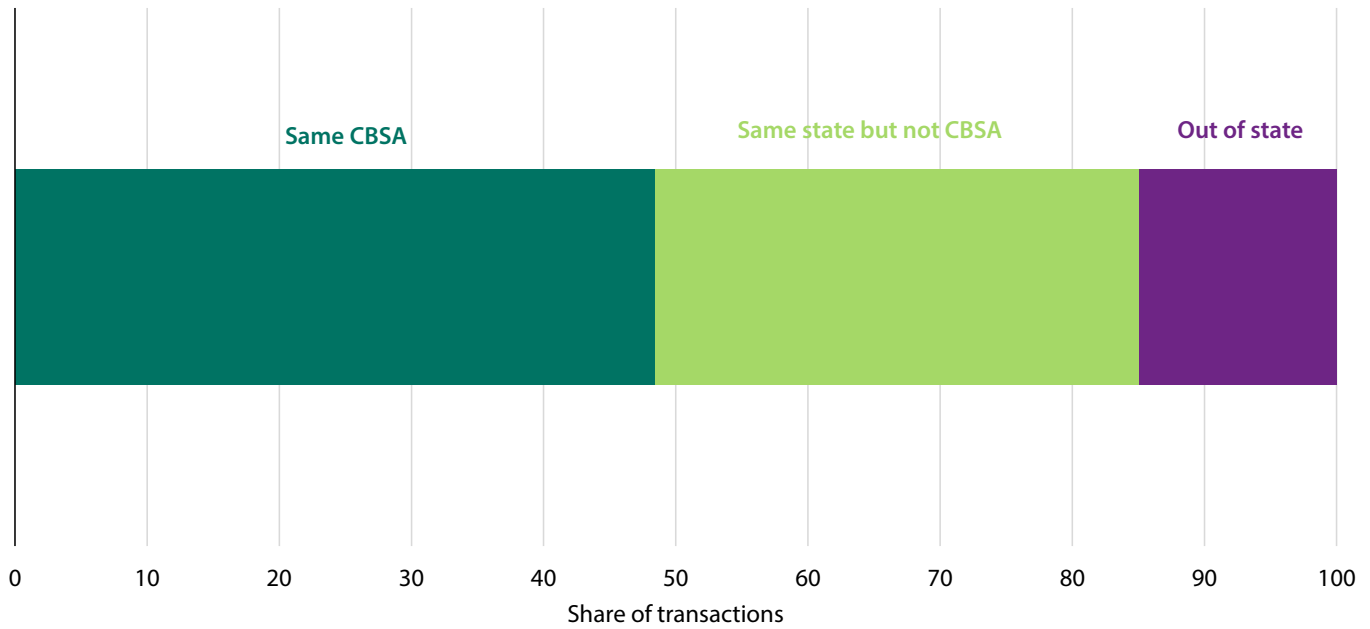


Source: American Hospital Association 2016, 2018.



FIGURE 7.

## Percent of Mergers between Hospitals in the Same Area



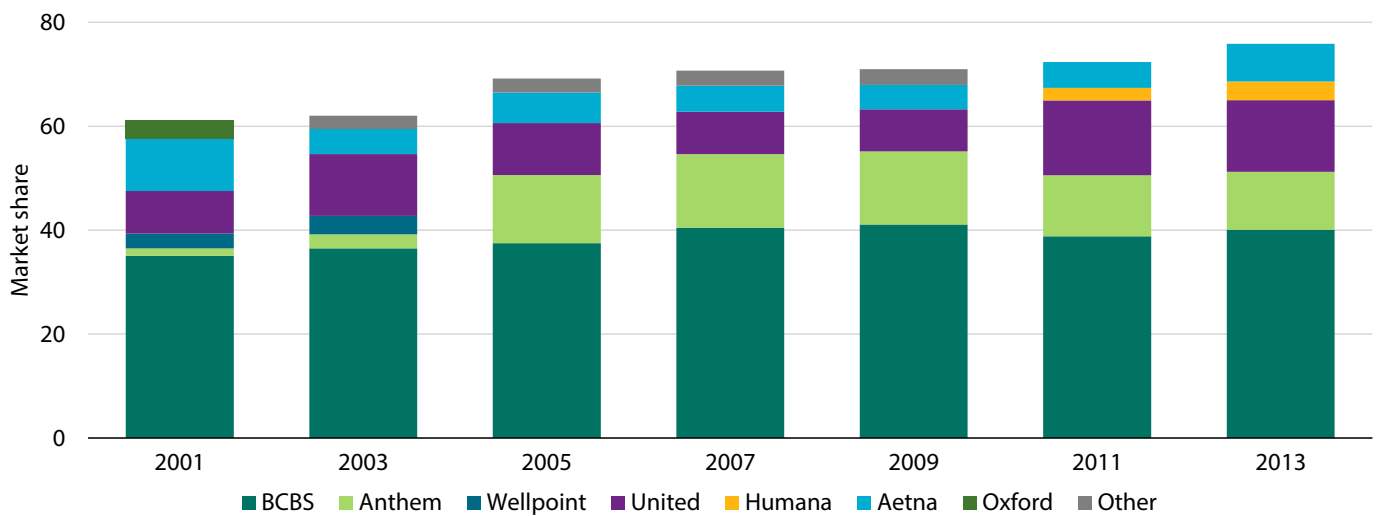
Source: Dafny, Ho, and Lee 2019.

Note: CBSA refers to core-based statistical areas. Data are for 2010–12.



FIGURE 8.

## Market Share of Top Eight Insurers in the Fully Insured Commercial Market



Source: Courtesy of Professor Leemore Dafny.



with no close competitors (Cutler and Scott Morton 2013; Fulton 2017).<sup>7</sup> This includes cities like Boston (Partners HealthCare), Cleveland (Cleveland Clinic and University Hospital), Pittsburgh (University of Pittsburgh Medical Center), and San Francisco (Sutter Health). Mergers that eliminate close competitors cause direct harm to competition. In addition, once a firm has obtained a dominant position it has an incentive to maintain or enhance that position, including by engaging in anticompetitive practices.

### *Physicians*

Capps, Dranove, and Ody (2017) find that there has been major consolidation among physician practices. Physician practices with 11 or more doctors grew larger from 2007 to 2013, mainly through acquisitions of smaller physician practices, while practices with 10 or fewer doctors became smaller. Muhlestein and Smith (2016) also report that from 2013 to 2015 the proportion of physicians in small practices dropped, while the proportion in large practices increased. Kane (2017) reports similar trends. Fulton (2017) reports that 65 percent of Metropolitan Statistical Areas (MSAs) were highly concentrated for specialist physicians, and 39 percent were concentrated for primary care physicians. Fulton finds a particularly pronounced increase in market concentration for primary care physicians.

Perhaps the most notable trend is the very large number of acquisitions of physician practices by hospitals. In 2006, 28 percent of primary physicians were employed by hospitals. By 2016 that number had risen to 44 percent (Fulton 2017). The American Medical Association reports that 33 percent of

all physicians were employed by hospitals in 2016, and fewer than half of all physicians own their own practice (Kane 2017). Fulton (2017) finds that increased concentration in primary care physician markets is associated with practices being owned by hospitals. Venkatesh (2019) documents nearly 31,000 physician practice acquisitions by hospitals from 2008 to 2012, and finds that over 55 percent of physicians are in hospital-owned practices.

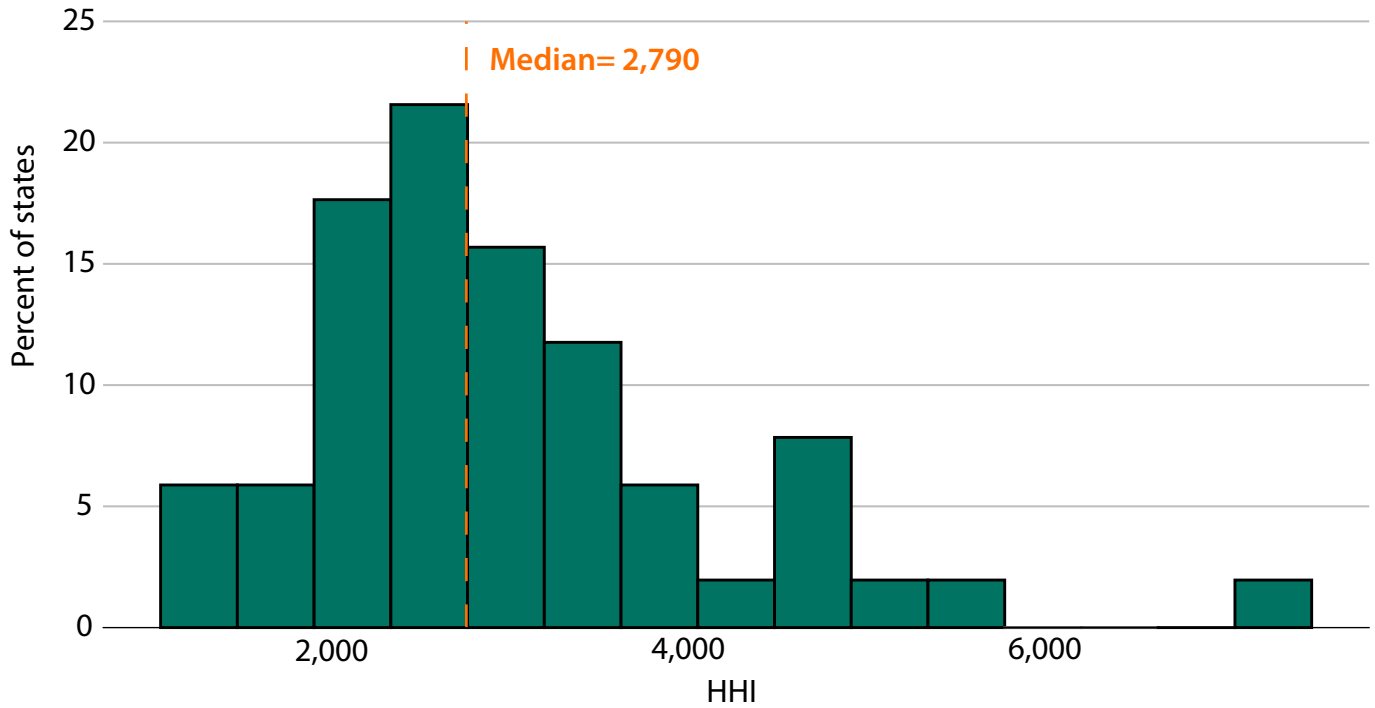
It is important to note that the vast majority of physician practice mergers and many hospital acquisitions of physician practices are not reported to the federal antitrust enforcement agencies because these transactions are often too small to fall under the Hart-Scott-Rodino reporting guidelines (Capps, Dranove, and Ody 2017).<sup>8</sup> Consideration should be given to adopting simple, streamlined reporting requirements for smaller transactions so that the enforcement agencies are able to properly track them and consider whether any are of concern (Baker and Scott Morton 2019).

### *Insurers*

The insurance industry is also highly concentrated: Fulton (2017) finds that 57 percent of health insurance markets were highly concentrated in 2016. As shown in figure 8, the market share of the top eight insurers in the fully insured commercial segment was 76 percent in 2013, up from 61 percent in 2001. Looking at the state or local level in figures 9a and 9b, we see the concentration is even more pronounced. In 2018 the median HHI for states was 2,790, and the median HHI for MSAs was 3,211. A full 75 percent of MSAs were highly concentrated, as defined by the antitrust authorities.

FIGURE 9A.

### HHI for Self and Full Insurance Markets, by State



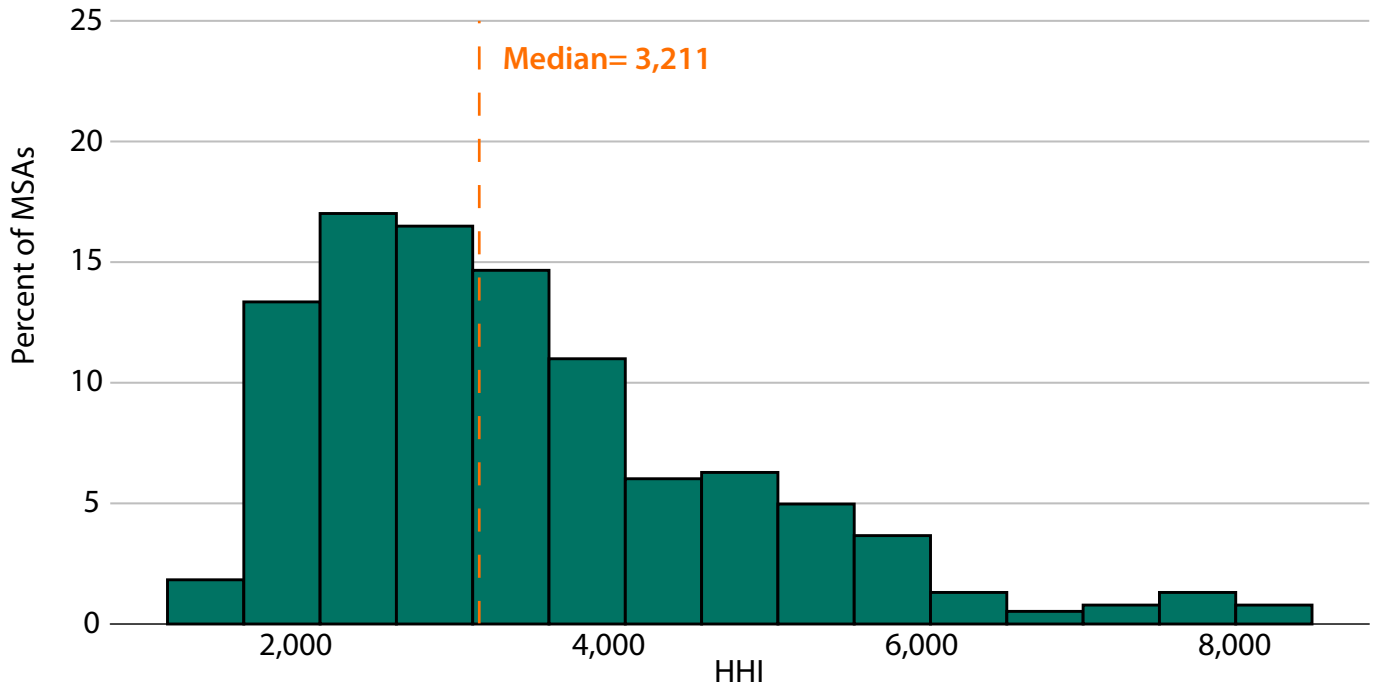
Source: American Medical Association 2019.

Note: HHI values are as of January 1, 2018. They are for combined HMO+PPO+POS+EXCH (total) product markets.



FIGURE 9B.

### HHI for Self and Full Insurance Markets, by MSA



Source: American Medical Association 2019.

Note: HHI values are as of January 1, 2018. They are for combined HMO+PPO+POS+EXCH (total) product markets. MSAs are metropolitan statistical areas.



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# The Challenge: Anticompetitive Conduct and Insufficient Competition Prevent Health-Care Markets from Working Effectively

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There is now a considerable body of scientific research evidence on the impacts of competition and consolidation in health care. Most of the research studies are on the hospital sector because data have typically been more readily available for hospitals than for physicians or for insurers, but there are now a considerable number of research studies on those industries as well (see Dranove and Satterthwaite 2000; Gaynor, Ho, and Town 2015; Gaynor and Town 2012a, 2012b; Gaynor and Vogt 2000; Tsai and Jha 2014; and Vogt and Town 2006 for reviews of the evidence). The research consistently shows that competition results in lower prices, and often in higher quality.

## IMPACTS ON PRICES

### *Hospitals*

Since there has been so much consolidation in the hospital industry, I focus here on evidence on the impacts of hospital mergers. The many studies look at a large number of different mergers in different places at different times, and all find substantial increases in prices resulting from mergers in concentrated markets (e.g., Capps and Dranove 2004; Capps, Dranove, and Satterthwaite 2003; Dafny 2009; Gaynor and Vogt 2003; Gowrisankaran, Nevo, and Town 2015; Haas-Wilson and Garmon 2011; Krishnan 2001; Town and Vistnes 2001; Vita and Sacher 2001; Tenn 2011; Thompson 2011). Price increases on the order of 20 or 30 percent are common, with some increases as high as 65 percent.<sup>9</sup>

The FTC conducted a series of studies of the impacts of consummated mergers between hospitals that were plausibly close competitors (premerger) in concentrated markets. These studies all found large increases in prices due to the mergers. Haas-Wilson and Garmon (2011) studied the merger of the Evanston Northwestern and Highland Park hospitals in the Chicago suburbs. They find that the merger led to substantial price increases at Evanston Northwestern for four out of five insurers, and price increases of 50 percent or more for one insurer. Tenn (2011) examined the merger of Sutter and Summit in the San Francisco Bay area. He finds that the merger led to Summit's prices increasing by 28 to 44 percent. Thompson (2011) looked at the merger of New Hanover and Cape Fear hospitals in Wilmington, North

Carolina. Her results show that three of four insurers in the area experienced a large price increase, while one insurer experienced a decrease in prices.<sup>10</sup>

In addition, there have been some studies that simulate the effects of potential mergers. These studies also find large increases in hospital prices resulting from mergers. Gowrisankaran, Nevo, and Town (2015) examine the impacts of a potential merger of two hospital systems in Northern Virginia. They find that the acquisition would lead to a 30 percent price increase at the acquired hospital. Gaynor and Vogt (2003) simulate the impact of a hospital merger in San Luis Obispo, California, and predict that hospital prices would increase by up to 53 percent, with no significant difference in merger effects if the merging hospitals are not-for-profit or for-profit.<sup>11</sup>

These results make economic sense. Hospitals' negotiations with insurers determine prices and whether they are in an insurer's provider network. Insurers want to build a provider network that employers (and consumers) will value. If consumers view two hospitals as good alternatives to each other (close substitutes), then the insurer can substitute one for the other with little loss to the value of their product, and therefore each hospital's bargaining leverage is limited. If one hospital declines to join the network, customers will be almost as happy with access to the other. If the two hospitals merge, the insurer will now lose substantial value if they offer a network without the merged entity (if there are no other hospitals viewed as good alternatives by consumers). The merger therefore generates bargaining leverage and hospitals can negotiate a price increase.

Overall, these studies consistently show that when hospital consolidation is between close competitors, it raises prices by substantial amounts. Consolidated hospitals that are able to charge higher prices due to reduced competition are able to do so on an ongoing basis, making this a permanent rather than a transitory problem. It is important to note that, due to the large amount of consolidation that has occurred, most hospital markets are now highly concentrated, making these markets susceptible to competitive harm from further consolidation.



There is also more recent evidence that mergers between hospitals that are not near to each other can still lead to price increases. Quite a few hospital mergers are between hospitals that are not in the same area (see figure 7 and Cooper et al. 2019). One might think that such mergers would not lead to diminished competition. However, many employers have locations with employees in a number of geographic areas. These employers will most likely prefer insurance plans with provider networks that cover their employees in all of these locations. An insurance plan thus has an incentive to have a provider network that covers the multiple locations of employers. It is therefore costly for that insurer to lose a hospital system that has hospitals in multiple locations—their network would become less attractive. This means that a merger between hospitals in these locations can increase their bargaining power, and hence their prices.

There are two recent papers finding evidence that such mergers lead to significant hospital price increases. Lewis and Pflum (2017) find that such mergers lead to price increases of 17 percent. Dafny, Ho, and Lee (2019) find that mergers between hospitals in different markets in the same state (but not in different states) lead to price increases of 7 to 9 percent. Understanding the competitive effects of cross-market hospital mergers is an important area for further investigation and to determine appropriate policy responses.

### *Physicians*

There is also substantial evidence that physician practices facing less competition have substantially higher prices. Koch and Ulrick (2017) examine the effects of a merger of six orthopedic groups in southeastern Pennsylvania and find that the merger generated large price increases—nearly 25 percent for one payer and 15 percent for another. Dunn and Shapiro (2014), Baker et al. (2014), and Austin and Baker (2015) all find that physician practices that face fewer potential competitors have substantially higher prices.

Moreover, studies that examine the impacts of hospital acquisitions of physician practices find that such acquisitions result in significantly higher prices and more spending (Baker, Bundorf, and Kessler 2014; Capps, Dranove, and Ody 2016; Neprash et al. 2015; Robinson and Miller 2014). For example, Capps, Dranove, and Ody (2016) find that hospital acquisitions of physician practices led to prices increasing by an average of 14 percent while patient spending increased by 4.9 percent.

### *Insurers*

Insurance prices are somewhat more complicated. Insurer premiums are driven in large part by medical expenses: premiums cover the majority of health-care expenses of enrollees, so factors that increase health-care spending also increase health insurance premiums.<sup>12</sup> But insurance

premiums also respond strongly to competition, and markets with more insurers have substantially lower premiums.

The cost of private health insurance net of medical expenses has grown rapidly in recent years (12.4 percent annual growth in 2014 and 7.6 percent in 2015), such that health insurance costs comprised 6.6 percent of total health spending in 2015, compared to 5.5 percent in 2009 (Martin et al. 2017). Furthermore, there is substantial geographic variation in health insurance premiums. For example, premiums for an individual silver plan in the Affordable Care Act marketplaces ranged from \$163 to \$1,119 per month (HIX Compare 2019).

Research evidence indicates that premiums are higher in insurance markets that are more consolidated, leading to concerns about competition among insurers and about increasing consolidation (Dafny 2010, 2015; Dafny, Duggan, and Ramanarayanan 2012). For example, the merger between Aetna and Prudential in 1999 was found to have led to a 7 percent increase in premiums for large employers. Similarly, the Sierra United merger in 2008 was found to have led to an almost 14 percent increase in small group premiums (Guardado, Emmons, and Kane 2013). Moreover, researchers have found that adding one more insurer to an Affordable Care Act marketplace reduces premiums by 4.5 percent (Dafny, Gruber, and Ody 2015), and that eliminating an insurer for an employer to choose from can lead to large (16.6 percent) premium increases (Ho and Lee 2017).

## **IMPACTS ON QUALITY**

Just as important—if not more important—as impacts on prices are impacts of competition on the quality of care. The quality of health care can have profound impacts on patients' lives, including their basic functioning and well-being, and their probability of survival.

### *Hospitals*

A number of studies have found that patient health outcomes are substantially worse at hospitals in more-concentrated markets, where those hospitals face less potential competition.

Studies of markets with administered prices (e.g., Medicare) find that less competition leads to worse quality. One of the most striking results is from Kessler and McClellan (2000), who find that risk-adjusted one-year mortality for heart attack (acute myocardial infarction) patients on Medicare is significantly higher in more-concentrated markets.<sup>13</sup> In particular, patients in the most concentrated markets had mortality probabilities 1.46 percentage points higher than those in the least concentrated markets (i.e., a 4.4 percent difference) as of 1991. This is an extremely large difference—it amounts to more than 2,000 fewer (statistical) deaths in the least concentrated versus the most concentrated markets.



There are similar results from studies of the English National Health Service (NHS). The NHS adopted a set of reforms in 2006 that were intended to increase patient choice and hospital competition, and introduced administered prices for hospitals based on patient diagnoses (analogous to the Medicare Prospective Payment System in the United States). Two recent studies examine the impacts of this reform (Cooper et al. 2011; Gaynor, Moreno-Serra, and Propper 2013) and find that, following the reform, risk-adjusted mortality from heart attacks fell more at hospitals in less-concentrated markets than at hospitals in more-concentrated markets. Gaynor, Moreno-Serra, and Propper (2013) also look at mortality from all causes and find that patients fared worse at hospitals in more-consolidated markets.

Studies of markets where prices are market determined (e.g., markets for those with private health insurance) find that consolidation can lead to lower quality, although some studies go the other way. My assessment is that the strongest scientific studies find that quality is lower where there is less competition. For example, Romano and Balan (2011) find that the merger of Evanston Northwestern and Highland Park hospitals had no effect on some quality indicators, while it harmed others. Capps (2005) finds that hospital mergers in New York State had no impacts on many quality indicators, but led to increases in mortality for patients suffering from heart attacks and heart failure. Hayford (2012) finds that hospital mergers in California led to substantially increased mortality rates for patients with heart disease. Cutler, Huckman, and Kolstad (2010) find that the removal of barriers to entry led to better performing (lower mortality rate) coronary artery bypass graft surgeons gaining market share at the expense of worse performing (higher mortality rate) surgeons. Haas, Gawande, and Reynolds (2018) find that system expansions (such as those due to merger or acquisition) can pose significant patient safety risks. Short and Ho (2019) find that hospital market concentration is strongly negatively associated with multiple measures of patient satisfaction.

### *Physicians*

There is also evidence that the quality of care delivered by physicians suffers when physician practices face less competition. Koch, Wendling, and Wilson (2018) find that an increase in consolidation among cardiology practices leads to increases in negative health outcomes for their patients. They find that moving from a zip code at the 25th percentile of the cardiology market concentration (i.e., a market with firms of more equal size, and hence relatively more expected competition) to one at the 75th percentile (i.e., one with firms that are more unequal in size, and thus relatively less expected competition) is associated with 5 to 7 percent increases in risk-adjusted mortality. Eisenberg (2011) finds that cardiologists who face less competition have patients with higher mortality rates. McWilliams et al. (2013) find that larger hospital owned

physician practices have higher readmission rates and perform no better than smaller practices on process-based measures of quality. Roberts, Mehotra, and McWilliams (2017) find that quality of care at high-priced physician practices is no better than the quality at low-priced physician practices. Scott et al. (2018) find no improvement in quality of care at hospitals that acquired physician practices compared to those that did not.<sup>14</sup>

### *Patient Referrals*

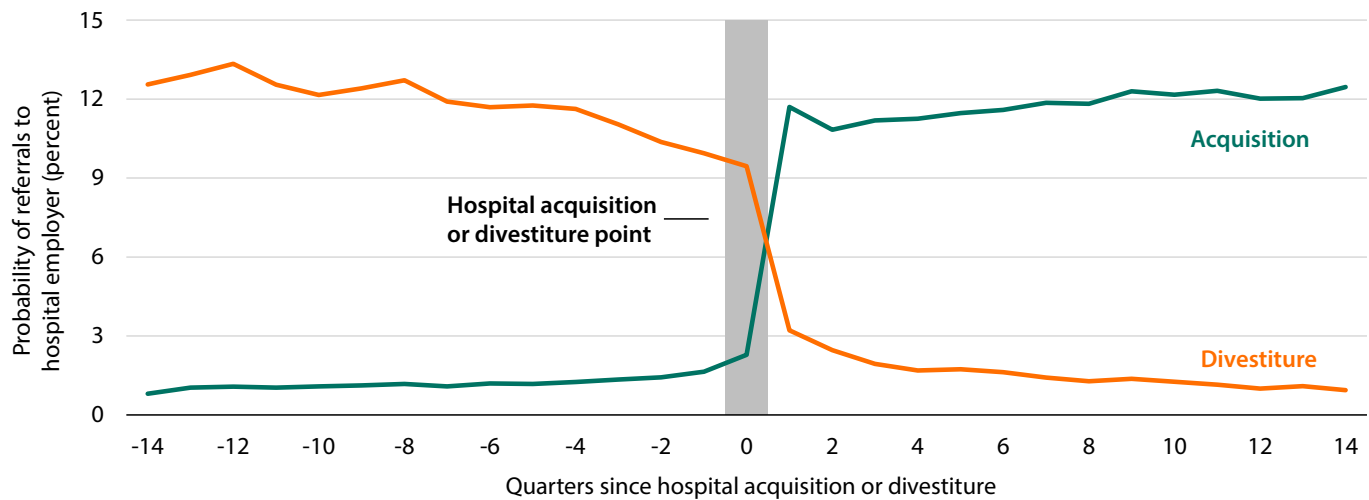
There has been concern about the possible impact of hospital ownership of physician practices on where those physicians refer their patients, and whether that is in the patients' best interests (Mathews and Evans 2018). A number of studies have found that patient referrals are substantially altered by hospital acquisition of a physician practice. Brot-Goldberg and de Vaan (2018) find that primary care physicians in Massachusetts who are in a practice owned by a health system are substantially more likely to refer patients to an orthopedist within the health system that owns the primary care physician's practice. They also estimate that this is largely due to anticompetitive steering. Venkatesh (2019) examines Medicare data and finds a nine-fold increase in the probability that a physician refers to a hospital once their practice is acquired by the hospital. Hospital divestiture of a practice has the opposite effect, as illustrated in figure 10. A study by Walden (2017, 5) also uses Medicare data and finds that hospital acquisitions of physician practices "increases referrals to specialists employed by the acquirer by 52 percent after acquisition," and reduces referrals to specialists employed by competitors by 7 percent. At present it is not known what the impact of these acquisition-induced referrals is on the quality of care received by patients; that is an important area for research.

### *Labor Market Impacts*

It is also possible that health-care consolidation has impacts on labor markets. Consolidation that causes competitive harm in the output market (i.e., through monopoly power) does not necessarily cause harm to competition in the input market (i.e., through "monopsony power," which is the term for market power in buying inputs). For example, two local grocery stores merge to form a monopoly selling groceries in an area, but purchase frozen food items to sell in their stores on a national market where they have to compete with lots of buyers. Consequently, the merged store does not possess monopsony power. Conversely, it is possible that a merger does not harm competition in the output market, but causes competitive harm in an input market. Consider two coal mines located in the same area that merge: Coal is sold on a national market, so the merger will not cause competitive harm. However, if the coal mines are the largest (or only) employers in the area, then the merger will cause harm to competition in the local labor market.

FIGURE 10.

## Effects on Physician Referrals of Hospital Practice Acquisitions and Divestitures



Sources: Mathews and Evans 2018; Venkatesh 2019.



In the case of health care, both the output market for health-care services and the input market for labor are local. As a consequence, a merger that causes harm to competition in the market for health-care services has real potential to harm competition in the labor market. The extent to which such a merger will cause labor market harms depends on the alternatives that workers have, such as what types of other jobs are available and where they are located. Nonspecialized workers, such as custodians, food service workers, and security guards, are less likely to be affected by a merger since their skills are readily transferable to other employers in other sectors.<sup>15</sup> Workers who have specialized skills that are not readily transferable to other employers in other sectors are more likely to be harmed. For example, consider a town with two hospitals, a large automobile assembly plant, and multiple retail and service establishments. If the two hospitals merge to form a monopoly, hospital custodians and security guards will have alternatives at the assembly plant or at the retail or service establishments. As a consequence, competition for these workers may be little affected by the merger. Nurses and medical technicians, however, have nowhere else to turn in the local market, so there will be substantial harm to competition for health-care workers.

There are a number of papers that have demonstrated the presence of monopsony power in the market for nurses (see, e.g., Currie, Farsi, and Macleod 2005; Staiger, Spetz, and Phibbs 2010; Sullivan 1989). These papers demonstrate that hospitals possess and exercise monopsony power in the market for nurses. They do not, however, provide direct evidence on the impacts of consolidation. A recent paper, however, looks directly at the impacts of hospital mergers

on workers' wages. Prager and Schmitt (2019) look at the impacts of 84 hospital mergers nationally between 2000 and 2010. They find that hospital mergers that resulted in large increases in concentration substantially reduced wage growth for workers with industry-specific skills, but did not reduce wage growth for unskilled workers.<sup>16</sup>

More study is needed to fully understand the impacts of consolidation on labor markets (and input markets generally) and to uncover evidence of those effects. Moreover, antitrust authorities need to know to what extent merger enforcement focused on output markets addresses potential input market competitive harms, and to what extent input markets require a separate policy focus. Furthermore, if the agencies are to pursue enforcement in this area, they need to develop economic and legal approaches to this issue.

### ANTICOMPETITIVE CONDUCT

Firms that acquire a dominant market position usually wish to keep it. The incentive to maintain or enhance a dominant position can be socially beneficial when it leads the firm to deliver value to consumers in order to keep or gain their business. This can result in lower prices, higher quality, better service, or enhanced innovation. But there can also be strong incentives for such firms to engage in anticompetitive practices to protect or enhance their market position by disadvantaging competitors or making it difficult for new products or firms to enter the market and compete.

There is research evidence that hospitals that face less potential competition are able to negotiate contracts with insurers that they find more favorable. Cooper et al. (2019) find that hospitals with fewer potential competitors are more

likely to negotiate contracts with insurers that have payment forms that are more favorable to them (e.g., fee for service) and reject payment forms they dislike (e.g., diagnosis-related group–based payment).<sup>17</sup> This is evidence that providers that face less potential competition are able to reject contractual forms they find unfavorable. This may impede the adoption of payment reforms that reduce costs or improve quality, and is a harm arising from lack of competition.

This suggests that hospitals with market power might not only be able to negotiate payment methods they prefer, but they also might be able to negotiate contracts with insurers that contain anticompetitive elements. This indeed is the issue in two recent antitrust cases: *United States and the State of North Carolina v. The Charlotte-Mecklenburg Hospital Authority, d/b/a Carolinas Healthcare System* (2019); and *People of the State of California Ex Rel. Xavier Becerra v. Sutter Health* (2018). Both cases revolve around the use of restrictive clauses in hospital contracts with insurers.

These clauses prevent insurers from using methods to direct their enrollees to less-costly or better hospitals. One of these methods is called tiering, which is a practice where enrollees pay less out of their own pockets for care received from providers in a more favorable group or tier, and pay more if they see a provider in a less favorable group or tier. Insurers use tiering to give enrollees incentives to obtain care at less-costly or higher-quality providers. This system thus gives providers an incentive to do the things it takes to be in the more favorable tier, and is one way to promote competition. Another method is steering: Enrollees are directed to providers who are preferred, due to lower costs or higher quality. Steering also promotes competition: Providers have incentives to agree to lower prices or to provide better quality or better service in order to be in the preferred group. A third method used by insurers is transparency—providing enrollees with information about the costs or quality of care at different providers. The intent is to provide enrollees with the information they need to choose the right provider, and by doing so to give providers incentives to compete on those factors.

In both of the antitrust suits mentioned above, the health systems had negotiated clauses in their contracts with insurers that prohibited the insurers from using any of these methods to try to direct patients to lower cost or better providers. The clauses prohibiting the use of these methods are called anti-tiering, anti-steering, and gag clauses. The concern with the use of these restrictive clauses is that they harm competition by preventing insurers from using methods that provide incentives to providers to compete to attract patients. The lawsuit by the DOJ against Carolinas Health System was settled, with the health system agreeing not to use these restrictive clauses (DOJ 2018). A settlement in the California attorney general’s lawsuit against Sutter Health System has also been announced (Abelson 2019).

At present there is no systematic evidence on the extent to which anti-tiering, anti-steering, and gag clauses are being used by health systems in their contracts with insurers, nor analysis of their impacts. This is an area that needs investigation to document the extent of the practice and its impacts.

Another practice that raises concerns is data blocking (Savage, Gaynor, and Adler-Milstein 2019). Data blocking is a practice in which health systems impede or prevent the flow of patients’ clinical data to providers outside their system. It also refers to a practice of electronic medical record providers to impede the flow of data to rival electronic medical record systems by deliberately rendering their systems incompatible. Data blocking by providers makes it more difficult for patients to go to rival providers, effectively locking them in, since their medical information does not go with them. Reducing patient mobility across providers harms competition and benefits incumbents. While there are extensive reports of data blocking, there is no systematic evidence on the extent of the practice or on its impacts. Study is needed to understand the nature of data blocking, and the extent to which it leads to harm to competition or to efficiencies (see Cutler 2020 for a discussion of electronic medical records and how to reduce administrative costs through improved compatibility).

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# The Proposal: Policies to Make Health-Care Markets Work

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As reviewed above, the evidence shows that more than 30 years of consolidation in health care has failed to deliver on lower costs, improved coordination of care, or enhanced quality. What has happened instead is that consolidation among hospitals, physician practices, and insurers who are close competitors has reduced competition, led to higher prices, and harmed quality. Perhaps even worse, reduced competition tends to preserve the status quo in health care by protecting existing firms and making it more difficult for new firms to enter markets and succeed. This leads to excessive rigidity and resistance to change, as opposed to the innovation and dynamism that we need in health care.

To address these problems with health-care competition, policymakers should turn to alternative solutions that enable and promote competition where it can be sustained, and to address the problems in markets where significant competition is not feasible. I therefore propose three broad approaches:

- Reduce or eliminate rules or regulations that encourage consolidation or limit entry and competition.
- Strengthen antitrust enforcement in health-care markets. This should be done to enable and strengthen competition where significant competition is feasible, and prevent circumstances from becoming worse in places where there is little competition.
- Enable monitoring and oversight of all health-care markets, and flexible, selective intervention in markets where significant competition is not feasible.

There has been quite a bit of attention devoted recently to suggesting policies to make health-care markets work better (Aaron et al. 2019; Azar, Mnuchin, and Acosta 2018; Gaynor, Mostashari, and Ginsburg 2017; Gee and Gurwitz 2018; Roy 2019). This is an area in which there seems to be quite a bit of agreement across the political spectrum on both the problems and solutions. We have serious problems with the functioning of our health-care markets, and things are getting worse, not better. It is critical that the United States adopt policies that address the problems in health-care markets. This means enabling and enhancing competition where possible,

and oversight or regulation where as a practical matter competition is not possible.

There are four key points that are important to recognize with regard to policies toward health-care markets. First, the goal is not to make these markets function like perfectly competitive markets. Health-care markets differ from canonical perfectly competitive markets in important ways: uncertainty, asymmetric information, product differentiation, high fixed costs, and so on. As a consequence, it is neither realistic nor productive to expect health-care markets to function like perfectly competitive markets.

The second key point is that even with their intrinsic market imperfections, health-care markets can be more competitive, and competition can lead to them performing better. The research evidence shows that with competition in health-care markets, prices are lower, quality is often higher, and new and innovative forms for the organization and delivery of care can emerge, compete, and thrive.

Third, there is no single policy to address the functioning of health-care markets, and there is no single actor to implement these policies. There is instead a constellation of policies to address various issues (forces driving consolidation, ease of market entry, attempts to thwart competition, inability to support competition, etc.) and different government sectors and agencies that operate in these spaces. In what follows, I will indicate a set of simple policies that will improve the functioning of health-care markets. Any of these will lead to improvements, although I expect that there are synergies between and among them so that they will prove more powerful in concert.

The fourth key point is that consolidation has led to many areas of the United States becoming dominated by a single powerful hospital system or health insurer. In these areas there is little scope for competition. The market is dominated by a large powerful firm and there are few good alternatives for consumers, employers, or insurers (or providers in the case of a dominant insurer). Entry is difficult in these markets and seldom happens. Breaking up these dominant firms is a possible means to enable competition, but antitrust suits to break up firms with market power are difficult, expensive, and rare; antitrust enforcers are reluctant to bring them. As a



consequence, for many areas in the United States I think there is little hope of fostering meaningful competition in health care anytime soon. This dictates a flexible approach to policy toward health-care markets that promotes competition where practical, but uses selective regulatory intervention where necessary.

## REDUCE OR ELIMINATE POLICIES THAT ENCOURAGE CONSOLIDATION OR IMPEDE ENTRY AND COMPETITION

Health care is a highly regulated industry, at both the federal and state levels. Rules and regulations created by federal and state agencies are often well intended, but do not take account of potential impacts on competition. The result can be policies that either unintentionally encourage consolidation, or impede entry or competition. These policies need to either be modified or ended so that they are narrowly tailored to achieve their objectives, and thereby avoid harming the functioning of health-care markets.

It has been well documented that certain Medicare payment policies have such unintended effects (Desai and McWilliams 2018; Forlines 2018). Medicare pays additional facility fees to hospitals for physician services provided in outpatient departments, even when the identical service can be performed in a freestanding physician's office. These payments were originally intended to help cover the overhead costs for services that can only be provided in hospitals, especially those that involve standby costs, such as emergency department and specialized services (e.g., high-end imaging and burn care). Since hospitals employ a large and increasing number of physicians, more and more of them are in specialties outside the traditional hospital-based specialties. This trend means that additional facility fees are now paid for a wide range of physician services that do not draw on specialized hospital overhead and are commonly provided outside hospitals, sometimes in offices external to the hospital campus.

Facility fees for services that can be provided outside a hospital provide a strong incentive for hospitals to employ more physicians and for physicians to be acquired by hospitals, and thus encourage consolidation. Physician practices purchased by hospitals can get higher payment rates from private payers and patients, both from the facility fees and from the greater leverage that hospitals have with private payers in negotiating payment rates for their employed physicians. Higher payment rates for physician services provide hospitals the wherewithal to pay physicians more than they can earn in private practice.

Hospital employment of physicians reduces competition by combining practices and eliminating them as competitors, and through pressures on employed physicians to refer patients to that hospital and its affiliated specialists. The

Medicare Payment Advisory Commission recommends eliminating this additional payment by Medicare for those services that are frequently performed in physician offices and that are not related to the emergency department. Congress addressed the issue partially in 2015, eliminating these payments for physician services delivered away from the hospital campus for future hospital purchases of physician practices or facilities. While this is a step in the right direction, this leaves existing payments in place and still allows physicians who newly begin practicing at on-campus hospital outpatient departments to receive higher facility fees.

Therefore, the following policies should be adopted.

- Medicare should make payments site-neutral when they are made for services typically performed in physicians' offices and not related to the emergency department; in other words, the payment for a physician office-based service would be the same whether the practice is independent or hospital owned.
- State Medicaid programs and private insurers should also adopt site-neutral payments if they are currently not doing so.

If Medicare changes its policy, that would likely increase the probability that Medicaid and private insurance also change their policies, thereby substantially magnifying the benefits of the policy change.

Another payment policy that unintentionally fosters consolidation is the Section 340b program, which enables hospitals that treat substantial numbers of low-income patients to obtain pharmaceuticals at large discounts not available to independent physician practices. The program was intended to help safety-net hospitals that provide substantial uncompensated care, but an increasing number of hospitals have qualified over time, and qualifying hospitals can receive the discounted price on all the medications they purchase, and not just those dispensed to indigent patients. The Section 340b program creates an artificial incentive for physicians who administer very expensive drugs, such as oncologists, to become employed by hospitals. Section 340b-eligible hospitals can earn substantial profits when they administer drugs to insured patients, especially in the outpatient department. This gives hospitals the ability to compensate specialists at higher rates than can be earned in independent practice.

Therefore, the following policies should be adopted.

- The Section 340b program should be reevaluated to examine whether it has become much broader than the intended purpose, and it should be revised to reduce the anti-competitive results from increased hospital employment of physician specialists. Specifically, the Health Resources

and Service Administration should investigate alternative implementation approaches.

- Section 340b discounts should be tied to eligible patients rather than to the site of service (hospital or doctor's office). This would achieve the objective of aiding hospitals treating indigent patients, but would not create an incentive for hospitals and physicians to consolidate.

More generally, federal and state executive branch agencies should be explicitly charged with considering the impacts of proposed regulation on competition and having to analyze and report on competitive impacts (e.g., Obama 2016). The federal antitrust enforcement agencies already work with executive agencies to analyze and comment on competitive impacts of proposed regulations, when requested. This cooperation can be formalized so that executive agencies are required to obtain input from the antitrust enforcement agencies (Baker and Scott Morton 2019). At the state level, governments can ask their attorney general's office or the federal antitrust enforcement agencies for analysis and comment. States can be provided with incentives to do this. One avenue is by tying federal matching funds for federal-state programs (Federal Medical Assistance Percentages) to states' compliance with obtaining analysis and comment of competitive impacts.<sup>18</sup> Another avenue would be to allocate federal funds to be paid out to states that comply with these standards. The antitrust enforcement agencies have the expertise to analyze competitive impacts; working together with executive agencies would help to avoid unintended consequences that are harmful to competition. The antitrust enforcement agencies will require additional funding if this new task is to be assumed and undertaken.

Another set of things that can be done to reduce unintended incentives to consolidate is to reduce administrative burdens that generate more costs than benefits. One example of these is quality reporting. Quality reporting is potentially valuable, but in practice is conducted by multiple entities including Medicare, Medicaid, and private insurers, many of whom require provider reporting of a large set of differing quality measures. Coordination among payers to agree on a standard that comprises a common set of quality measures could reduce administrative burden and thereby reduce incentives to consolidate. Standard setting is common in many industries and can both facilitate competition and reduce costs.<sup>19</sup> In a separate Hamilton Project proposal by David Cutler (2020), a number of similar reforms are described that would reduce administrative costs in the health-care system.

In addition, some states have regulations that unintentionally make it difficult for new firms to enter or artificially alter the negotiating positions of providers and payers. These include certificate of need (CON) laws, any willing provider (AWP) laws, network adequacy regulations, scope of practice laws,

provider licensure, and certificates of public advantage (COPAs). States should examine these laws and practices to make sure they are narrowly tailored to benefit the public and do not unintentionally protect incumbents and harm competition. Where, as in some cases, they simply protect existing market participants and harm competition, these regulations should be eliminated. As mentioned previously, states can be given incentives to address these regulatory issues by tying federal matching funds to meeting criteria on competitive impacts of regulations, or establishing new funding for this purpose. The federal antitrust enforcement agencies already work with state governments to assess and comment on the competitive impacts of regulations. An assessment from one of the federal antitrust enforcement agencies can be made one of the criteria for a state qualifying for funding. Additional funding will be required for the antitrust enforcement agencies to support this expanded activity.

### *Certificate of Need Laws*

Thirty-six states and the District of Columbia have CON laws for health care (National Conference of State Legislatures 2020). CON laws require the construction of any new health-care facility to be approved by a state health planning agency (that issues a certificate of need). The goal of CON programs is to control health-care costs by restricting duplication of facilities and services and determining whether new capital expenditures meet a community need.

While well intended, these programs have not had the desired impact. Moreover, CON regulatory programs have often been captured by the health-care providers in the market and used to disadvantage competitors or keep new potential competitors out (e.g., Mitchell and Koopman 2016; Sloan 1981; Stratmann and Wille 2016). These programs should either simply be discontinued, or narrowly tailored to achieve their objectives and be subjected to review to ensure they are not harming competition.

### *Any Willing Provider Laws*

As of 2014, 27 states had AWP laws on the books (Delbanco and Bazzaz 2014; Noble 2014). These laws require health insurers to include any provider in their network who so desires and to pay them at in-network rates. These laws may have been intended to protect consumer choice of provider, or possibly to protect providers against arbitrary exclusion by insurers, but their main effect is to undermine competition.

As described previously, competition in health care takes the form of providers competing to be included in insurers' networks by offering attractive prices and quality. This is where provider price competition takes place in health-care markets. In-network providers then compete to attract

patients from among an insurer's enrollees. That subsequent competition is mainly over convenience and quality.

Provider price competition, then, is induced by selective contracting. The quid pro quo is increased patient volume for the provider in exchange for lower prices. Providers get increased patient volume because insurers do not include every provider in their network. If providers know that anyone can be in a network due to an AWP law, then they have significantly less incentive to compete on price.

Furthermore, providers might also have little incentive to provide better quality or service, again because they must be included in any insurer's network. Research evidence shows that AWP laws increase health-care costs (see, e.g., Hosken, Schmidt, and Weinberg 2019; Nichols 2014). If some consumers desire broader networks that include more providers and are willing to pay for them, then a well-functioning insurance market will provide consumers with that choice. Similarly, consumers who are not willing to pay for broader provider choice should be allowed to select plans that cost less and have narrower networks.

Therefore, states with AWP laws should eliminate them, either by allowing them to sunset or through legislation to repeal them, and neither states nor the federal government should adopt new AWP laws or regulations.

### *Network Adequacy Regulations*

Network adequacy regulations are intended to ensure that plans offered by insurers have provider networks that offer adequate access to enrollees, both in terms of location and of services. These regulations are enforced by state departments of insurance and by the Center for Medicare and Medicaid Services (for Medicare Advantage plans and for plans offered through the Affordable Care Act marketplaces). These regulations can benefit consumers by ensuring that plans they might choose have providers offering services within reasonable proximity to them. However, network adequacy regulation can also undermine attempts by insurers to promote competition via selective contracting. Network adequacy oversight should therefore be narrowly tailored to achieve its goals, and should take account of impacts on competition.

### *Scope of Practice Laws*

All states have scope of practice laws that specify what services nonphysician medical providers (e.g., nurse practitioners, certified registered nurse anesthetists, pharmacists, psychologists) are allowed to perform and the circumstances and extent to which they are allowed to practice independently. These restrictions are intended to protect consumers from harm from nonphysician medical providers practicing beyond the scope of their training

or capabilities. However, in practice these laws and the way they are implemented often prevent nonphysician medical providers from practicing to the full extent of their capabilities. Allowing nonphysician medical providers to practice to the full extent of their capabilities permits health-care markets to function efficiently by expanding the supply of medical care services, particularly basic primary care services, increasing access, and reducing cost (e.g., FTC 2014; Robert Wood Johnson Foundation 2012).

Therefore, states should review their scope of practice laws and how they are implemented. Specifically, the criteria for decisions on scope of practice issues should be amended to indicate that the only justification for restricting scope of practice is the safety of the public. Restrictions, if any, should be narrowly targeted to address specific safety concerns, based on empirical evidence regarding the risk of harm; in addition, impacts on competition should be considered. States should review how their boards are established and how they operate to make sure they are in compliance with these requirements. For more on how health-care scope of practice rules could be reformed, see a Hamilton Project proposal by E. Kathleen Adams and Sara Markowitz (2018).

### *Provider Licensure*

Similar issues arise with state licensing of professionals generally. States should make sure that their licensing laws and practices are written and executed to protect the public, not incumbents, and that licensing laws and practices do not squelch innovative entrants or practices. This applies, for example, to new practice developments like telehealth.

State licensing boards should seek to facilitate practices, such as telehealth, that may promote competition and innovation, and in crafting regulations should choose approaches that place the fewest possible restrictions on competition and innovation while still satisfying legitimate and substantiated public health and safety goals. In addition, states that have not done so already should adopt licensure reciprocity across states, in order to facilitate entry and the advance of innovative ways of organizing and delivering care.

### *Certificates of Public Advantage*

Some states have issued COPAs to merging hospitals (these could be issued to other health-care firms as well, and not only to hospitals) (see FTC 2016a, 2016b). These COPAs shield the merging entities from antitrust scrutiny, with the promise of state oversight. However, there is not typically the infrastructure or experience for this kind of oversight in states that institute COPAs. The oversight in essence amounts to regulation, which requires a substantial amount of information and the ability to collect it, analyze it, and act on it. Since states do not already do this, COPA oversight amounts to instituting a regulatory apparatus for only one

firm. It is unlikely states will provide the resources that will be adequate to the task. As a consequence, issuing a COPA risks allowing anticompetitive mergers without adequate oversight. States should therefore discontinue the use of COPAs.

## STRENGTHENING ANTITRUST ENFORCEMENT

Antitrust enforcement in health care by federal and state governments, both horizontal and vertical, needs to be continued and enhanced. The U.S. antitrust enforcement agencies, the Antitrust Division of the DOJ, and the FTC enforce U.S. antitrust laws, promote competition (such as consulting with other federal agencies or with state governments), and study markets and competition.<sup>20</sup> The DOJ and the FTC in their law enforcement capacities review mergers, monitor business practices, bring lawsuits to block mergers between firms that are likely to harm competition, sue to stop practices by firms that harm competition (e.g., practices that prevent rivals from fairly competing), and prosecute cases of collusion. Both agencies engage in competition advocacy and study markets and competition. The FTC has special authority through Section 6b of the Federal Trade Commission Act to study markets and use its subpoena authority to obtain access to relevant information for the purpose of a study. In practice, within the health-care sector the DOJ has focused on antitrust issues in health insurance markets and the FTC has focused on hospital, physician, and pharmaceutical markets.<sup>21</sup>

As I reviewed previously, there is a serious problem with lack of competition in health-care markets. Active enforcement is needed to prevent firms from acquiring more market power via mergers or anticompetitive conduct, and to preserve or enhance competition. In some markets conditions have evolved to the point that, short of major breakups of firms, there is little antitrust enforcement can do to restore competition. However, even in those places antitrust enforcement can play a role by preventing dominant firms from engaging in anticompetitive conduct to maintain or extend their market power. Moreover, asking the antitrust enforcement agencies to engage in more work with federal agencies and state governments to assess and comment on competitive impacts of regulations, and to study new areas to assess impacts on competition and antitrust implications, will require more resources. I therefore propose that policymakers:

- Increase funding for antitrust enforcement by \$156.75 million per year.
- Eliminate certain policy limits on antitrust enforcement, including:
  - remove the exemption of merging parties in small transactions from merger reporting,

- authorize the FTC to take action against anticompetitive conduct by not-for-profit firms, and
- permit the FTC to study the health insurance industry under the authority of Section 6b of the Federal Trade Commission Act.

- Strengthen the antitrust laws to strengthen the antitrust enforcement agencies' positions in court, act as a more effective deterrent, and conserve agency resources.
- Create a specialized court to hear all antitrust cases.

I suggest that the antitrust enforcement agencies do the following:

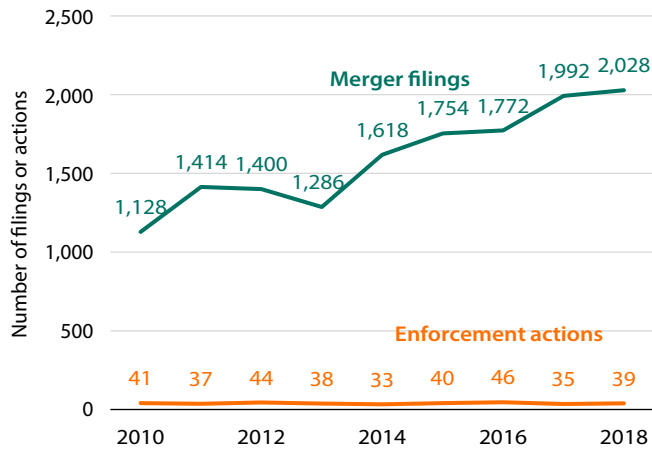
- Continue their efforts to block horizontal mergers that harm competition.
- Address anticompetitive practices in the health-care sector like anti-tiering, anti-steering, and gag clauses in agreements between providers and insurers.
- Study the following areas to determine if and how there are harms to competition, and to consider and assess theories and evidence of antitrust harms:
  - data blocking by health systems,
  - labor market effects of consolidation,
  - vertical consolidation, and
  - cross-market mergers (by firms in different geographic markets).

If we expect the antitrust enforcement agencies to do more in health care without reducing their efforts in the rest of the economy, then they will need more resources. The demands on the agencies have risen in terms of the number of merger filings, while their inflation-adjusted appropriations have declined, as shown in figures 11a and 11b. Not surprisingly, given the lack of increased funding the number of enforcement actions has stayed relatively constant, while merger filings have risen dramatically. A 33 percent increase in the budgets of the Antitrust Division of the DOJ and the FTC would permit the agencies to engage in investigation and enforcement efforts that keep pace with competition issues, while also making the necessary investments in new, developing areas. The DOJ Antitrust Division's budget for 2019 was \$165 million, and the FTC's 2019 budget was \$310 million. A 33 percent increase would provide the DOJ with an additional \$54.45 million, and the FTC with an additional \$102.3 million. This would cost \$156.75 million total—an extraordinarily modest addition to the federal budget (U.S. government spending was \$4.4 trillion in 2019).



FIGURE 11A.

## Total Merger Filings and Federal Antitrust Enforcement Actions, 2010–18



Source: Kades 2019.

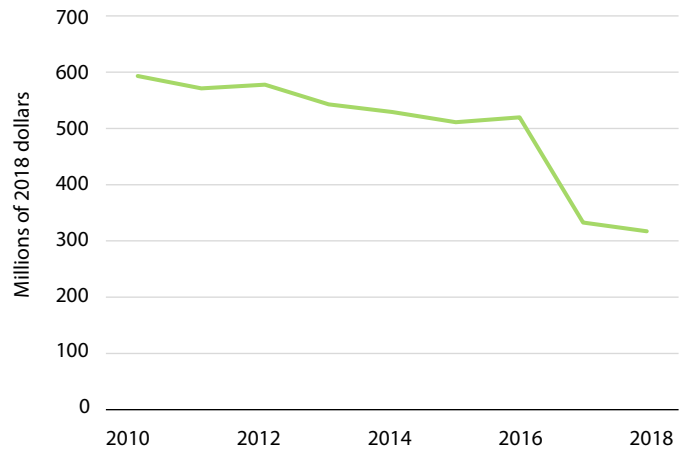
The decline in resources relative to demands not only makes it hard for the agencies to address antitrust issues as they arise, but it also makes it extremely difficult for them to allocate the necessary resources to proactively invest in important new and developing areas, including (but not limited to) anticompetitive conduct, vertical mergers, cross-market mergers, labor market impacts of mergers, and data blocking. I discuss some of these explicitly below.

To be clear, I think the antitrust division of the DOJ and the FTC need additional resources in general in order to fully accomplish their mission. I do not think additional resources should be restricted solely to health-care matters. The agencies have to be free to focus on those competition matters that in their judgment are most critical. Earmarking funding so it can be used for only one sector of the economy is unduly restrictive and prevents the antitrust enforcement agencies from using their knowledge and judgment to focus their efforts where they are most important and effective.

In addition to the problem of insufficient funding, the antitrust authorities also face policy limitations that impede their ability to police anticompetitive conduct. For example, the FTC is not authorized to take enforcement actions against anticompetitive conduct by not-for-profit firms (Federal Trade Commission Act, Section 45(a)(2), Section 44) and is not permitted to study the insurance industry under its Section 6b authority without an explicit request from Congress (Section 5(a) of the Federal Trade Commission Improvements Act of 1980). Removing these restrictions on the FTC will enable it to function to the full extent of its capabilities to protect competition and consumers in health-care markets.

FIGURE 11B.

## Real Antitrust Appropriations, 2010–18



Source: BLS 2010–18; DOJ 2020; FTC n.d.a.

Note: Appropriations are adjusted for inflation using the Producers Price Index for Legal Services.



Another limitation of current policy is that merging parties in small transactions are exempt from reporting mergers under the Hart-Scott-Rodino guidelines. Requiring parties in small transactions to report in a simple, streamlined way will enable the agencies to track the many small transactions in health care involving physician practices (both horizontal and vertical) that at present are not reported, many of which escape antitrust scrutiny.

Legislation to strengthen the antitrust laws also needs to be considered (Baker 2019; Baker and Scott Morton 2019). Market power appears to have been increasing for some time, and antitrust does not appear to have acted as a sufficient deterrent (Baker 2019). Strengthening the antitrust laws would better reflect the realities of market power, strengthen the enforcement agencies' positions in court, act as a more effective deterrent to firms contemplating actions that would harm competition, and likely conserve on agency resources in prosecuting cases.

In addition, another useful reform would be to create a specialized court to hear all antitrust cases (Baker and Scott Morton 2019). At present antitrust cases are heard by judges with no special training or expertise in antitrust law or economics. A specialized court would lead to better antitrust decisions in court, and permit the antitrust enforcement agencies to bring more-sophisticated cases that at present are difficult to pursue in court.

Yet another group of potential policy reforms are targeted at preventing or limiting actions by market participants that harm competition. Federal and state agencies can pursue and prevent practices that are intended to limit competition.

For example, anti-tiering, anti-steering, and gag clauses (in agreements between providers and insurers) prevent insurers from providing information to enrollees about more-expensive or less-expensive (or better or worse) providers, or from providing incentives to enrollees to go to less-expensive or better providers.

The federal antitrust enforcement agencies and state attorneys general can and should address these and other anticompetitive practices. In addition, state insurance commissioners can review contracts between insurers and providers and scrutinize them for clauses that harm competition and consumers. Finally, legislative bodies can enact legislation that bans or limits the use of such clauses in provider-insurer contracts. While there is anecdotal evidence about such practices, systematic knowledge is lacking. This is an area that needs further study and development of antitrust theories and evidence. Since this involves the health insurance industry, the FTC might need to have legislation passed, as proposed above, that lifts the prohibition on studies of the insurance industry.

Another area of concern with regard to potentially anticompetitive practice relates to reports of health systems engaging in data blocking—preventing or impeding patients’ clinical information from flowing to providers outside the system. This practice has the potential to harm competition by making it difficult for patients to move across providers. Much more needs to be known about the extent and nature of this practice, its impacts, and the extent of competitive harms or efficiencies.

Another area that needs further antitrust study concerns mergers in the hospital industry that are between hospitals in disparate geographic areas that do not overlap in the traditional antitrust sense. In other words, the merging hospitals do not increase their combined share of the market in any one location. Nonetheless, such mergers could harm competition, if, for example, the merging hospitals are important to have in a regional or national insurance network to offer to employers who operate regionally or nationally. There is evidence that such mergers can lead to significant price increases (Dafny, Ho, and Lee 2019; Lewis and Pflum 2017). At this point, however, more study is required to learn more about the phenomenon and to develop antitrust theories and evidence.

In addition, there is a great deal of vertical consolidation in health care in the form of hospitals acquiring physician practices. To date these acquisitions have been pursued by enforcement agencies as horizontal mergers.<sup>22</sup> Vertical cases are more difficult, but the enforcement agencies should consider vertical approaches to such acquisitions, and the necessary antitrust theory and evidence.

Finally, health-care consolidation has the potential to harm competition not only in the market for health-care services, but also in labor markets. There is some recent evidence demonstrating that mergers that result in large increases in concentration adversely affect wage growth for workers with skills specific to the hospital industry (Prager and Schmitt 2019). While this is welcome evidence, more investigation and study is required to learn more about the impacts of health-care consolidation on labor markets and to develop antitrust theories and evidence. In addition, it is not clear to what extent harms with respect to competition in the labor market are coincident with harms to competition in the product market (which are already the focus of antitrust enforcement). This needs to be known in order to determine whether the antitrust enforcement agencies need to devote resources to separately pursuing labor market harms from mergers in the health-care sector. The FTC recently announced a special study under its Section 6b authority of COPAs that will examine labor market impacts (FTC 2019). This will certainly be helpful, and is a welcome development.

### MONITORING, OVERSIGHT, AND INTERVENTION

The third component of my proposal is creating a new federal agency for monitoring, overseeing, and intervening in health-care markets. A national agency would likely be most efficient, but state-level agencies could work as well.

Monitoring and oversight are important in all markets, so that information is readily available and situations can be responded to promptly and appropriately. In addition, this agency will be particularly valuable for addressing the challenge of places where it is not realistic to expect health-care markets to be competitive. These include areas where there is not enough population to support more than one hospital or health insurer or more than a small number of physician practices. In addition, there are some areas with large populations that have come to be dominated by one very large health system or health insurer. These areas have the population to support more independent hospitals or insurers, but consolidation has led to them having only one dominant firm. While these areas in principle could support more firms, that is highly unlikely to happen. There are very substantial barriers to the entry of new hospitals or health insurers, and it is very difficult to break up merged firms via antitrust action. As a consequence, alternative policies need to be considered that address the problems arising from lack of competition in these areas.

Therefore, I propose creating a federal agency that is charged with monitoring and overseeing health-care markets, and that has the authority to intervene as necessary. Examples of such agencies are the Massachusetts Health Policy Commission and the Dutch Healthcare Authority. The Massachusetts Health Policy Commission, however, is authorized only to

monitor health-care markets, while the Dutch Healthcare Authority has the power to intervene in markets on a discretionary basis.

Mandatory data reporting is required for such an agency to engage in meaningful monitoring and oversight. A national health-care data warehouse is therefore a prerequisite for such an agency and for public information about health-care costs and quality to be enhanced. At present there are no national and publicly available data on total U.S. health-care costs and use, let alone on prices for specific services or providers.<sup>23</sup> Data and information are now as vital a part of our national infrastructure as are our bridges and roads. It is time to invest in a national health-care data warehouse that brings together private and public data to inform employers, policymakers, and consumers. Creating a health-care data warehouse to serve an agency monitoring health-care markets will also create a resource to serve the objective of making health-care information more broadly available.

This agency will monitor prices, costs, quality, contracts, and access to care, among other variables. There are many avenues through which health-care firms affect consumers and through which they can attempt to evade oversight. Therefore, this agency will need to monitor firm performance broadly, along multiple dimensions. It will use monitoring to identify markets that require oversight, either because of structural conditions (e.g., dominance by a single firm) or indicators of poor performance. When monitoring reveals a potential antitrust problem, the agency will notify the FTC or DOJ, and work with them as appropriate.

Oversight can take multiple forms, including (but not necessarily limited to) the following possibilities: It will entail providing information publicly, including to policymakers and to the general public. This can include publicizing both good and bad performance. Oversight also requires review and justification for outcomes that deviate from standards set by the authority, including excessive prices, deficient quality,

inadequate access, and harmful contractual provisions. Intervention should also be flexible and tailored to the problem at hand. If review uncovers unsatisfactory aspects of performance, then the agency should intervene in the least intrusive way possible to address the problem. In particular, this means intervening at the level of a market, or at the level of an individual firm, depending on the nature of the problem. In general, caution should be exercised before resorting to regulation. Past experience has shown that regulation can be difficult to design and administer effectively, and firms often have multiple ways to subvert regulatory oversight (Rose 2014).

When interventions are deemed necessary, they can include notifying the FTC or DOJ about a potential antitrust violation, setting a cap on prices or price increases, requiring improvements in quality performance along specified dimensions, and stopping the use of practices that harm the ability of rivals to compete or to enter. It should be noted that this is different from across-the-board explicit price regulation (e.g., ex ante administered prices as in Medicare, or price caps) for all providers, such as is used by Medicare and envisioned for proposed single payer health care (or Medicare for All). A Hamilton Project policy proposal by Michael Chernen, Leemore Dafny, and Maximilian Pany (2020) describes in more detail how price regulations could work to limit costs without unduly impairing market functioning.

Such regulations are not a substitute for a robust pro-competitive policy agenda. Attention will need to be paid to competition and its impacts on nonprice outcomes, notably the quality of care. As discussed above, evidence shows that lack of competition harms health-care quality for Medicare beneficiaries and for patients in the English NHS. Moreover, this new agency will need to work closely with the FTC and DOJ in monitoring markets and calling their attention to situations that harm competition and might constitute antitrust violations.

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# Questions and Concerns

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## *1. Does health-care consolidation achieve efficiency or quality improvements?*

It is plausible that consolidation between hospitals, physician practices, or insurers, in a number of combinations, could reduce costs, increase care coordination, or enhance efficiency. There could be gains from operating at a larger scale, eliminating wasteful duplication, improved communications, and enhanced incentives for mutually beneficial investments. However, it is important to realize that consolidation is not integration. Acquiring another firm changes ownership, but in and of itself does nothing to achieve integration. Integration, if it happens, is a long process that occurs after acquisition.

While the intuition, and the rhetoric, surrounding consolidation has been positive, the reality is less encouraging. The evidence on the effects of consolidation is mixed, but it is safe to say that it does not show overall gains from consolidation. Research has not found that merged hospitals, insurers, physician practices, or integrated systems are systematically less costly, higher quality, or more effective than independent firms (see Beaulieu et al. 2020; Burns, Goldsmith, and Sen 2013; Burns et al. 2015; Burns and Muller 2008; Goldsmith et al. 2015; McWilliams et al. 2013; Tsai and Jha 2014). For example, Burns et al. (2015) find no evidence that hospital systems are lower cost, Goldsmith et al. (2015) find no evidence that integrated delivery systems perform better than independents, Koch, Wendling, and Wilson (2018) find higher Medicare expenditures for cardiology practices in consolidated markets, McWilliams et al. (2013) find higher Medicare expenditures for large hospital-based practices, and Beaulieu et al. (2020) find no evidence of quality improvements due to hospital mergers. Schmitt (2017), however, finds evidence that mergers reduced costs in acquired hospitals, but not for acquiring hospitals, and he finds no evidence of cost reductions for any parties to a merger where the merging hospitals are located in the same market.<sup>24</sup> After more than three decades of extensive consolidation in health care, it seems likely that the promised gains from consolidation would have materialized by now and be detectable by research if they were truly there.

## *2. What about rural areas? How well do markets work for the Americans who live there?*

Rural communities are more susceptible to harms associated with lack of competition and the exercise of market power because they typically have fewer good alternatives. There are fewer providers in rural communities and alternatives are often far away. This implies that health-care providers located in these areas face fewer impediments to the exercise of market power (all other things remaining equal) than if they were in an urban area with closer alternatives.

There have also been a large number of rural hospital closures.<sup>25</sup> There are a number of reasons for this, including declining rural population, declining health insurance coverage in rural areas, and the overall secular shift from inpatient to outpatient care (Frakt 2019; Ramesh and Gee 2019). These closures can have serious negative impacts on health (e.g., Gurjal and Basu 2019).

With regard to market functioning, closures can affect competition, but if closures occur because of insufficient demand (due to declining population or shifts to outpatient care), then the affected area might not be able to support multiple hospitals; in other words, competition might not be viable in these locations.<sup>26</sup>

In that case, alternatives to competition have to be considered. There has been considerable discussion of policies to provide Americans living in rural areas with access to essential health-care services (e.g. Frakt 2019; Ramesh and Gee 2019). One factor to be considered is that providers in these situations will typically face little to no competition, necessitating some form of oversight, regulation, or public provision.

It may also be the case that the market underprovides services in these communities. If so, then subsidies or public provision might be judged necessary, although hospitals are not likely to be the most efficient way to provide the desired services (Capps, Dranove, and Lindrooth 2010; Ramesh and Gee 2019).

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# Conclusion

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**T**he health-care sector is one of the most important parts of our economy, both in terms of sheer size and in its impact on our lives. Unfortunately, the U.S. health-care system does not work very well, whether in terms of cost, quality, access, or innovation and responsiveness to consumers. Many of these problems are due to the poor functioning of health-care markets. Moreover, due to extensive consolidation, these problems are getting worse.

As severe as these problems are, our health-care system is not beyond fixing. While there is no single policy that will address all of the health-care system's ills, there are a constellation of policies that I've described here that, if enacted, will go a long way toward making the U.S. health-care system work better, to the benefit of all Americans.

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He is one of the founders of the Health Care Cost Institute, an independent non-partisan nonprofit dedicated to advancing knowledge about U.S. health care spending, and served as the first Chair of its governing board. He is also an elected member of the National Academy of Medicine and of the National Academy of Social Insurance, a Research Associate at the National Bureau of Economic Research, and an International Research Fellow at the University of Bristol. Prior to coming to Carnegie Mellon Dr. Gaynor held faculty appointments at Johns Hopkins and a number of other universities. He has been an invited visitor at the Hungarian Academy of Sciences in Budapest, the Hebrew University of

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His research focuses on competition and antitrust policy, particularly in health care markets. He has written extensively on this topic, testified before Congress, and advised the governments of the Netherlands, the United Kingdom, and South Africa on competition issues in health care. Gaynor is on the Pennsylvania Governor's Health Advisory Board and co-chaired the state's workgroup on shoppable care. He has won a number of awards for his research, including the American Economic Journal: Economic Policy Best Paper Award, the Victor R. Fuchs Research Award, the National Institute for Health Care Management Foundation Health Care Research Award, the Kenneth J. Arrow Award, the Jerry S. Cohen Award for Antitrust Scholarship (finalist), and a Robert Wood Johnson Foundation Investigator Award in Health Policy Research. Dr. Gaynor received his B.A. from the University of California, San Diego in 1977 and his Ph.D. from Northwestern University in 1983.

## Acknowledgments

I would like to thank Ryan Nunn, Jay Shambaugh, Stephanie Wilkinson, Zack Cooper, and participants at a Hamilton Project conference for very useful comments and suggestions, and Jana Parsons for exceptional editorial assistance. The Hamilton Project at the Brookings Institution provided financial support. I have full responsibility for the content of this paper. All opinions and any errors are mine alone.



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# Endnotes

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1. Pharmaceuticals constituted 1.7 percent of GDP in 2017. The market for pharmaceuticals is fundamentally different from the markets for health-care services and health insurance, and requires different policy approaches, so I do not discuss it here.
2. Of course, another important benefit is improved health that results from the health care that people use because the cost is covered by health insurance.
3. In addition, it is often difficult for individuals to observe the price of health care. Many health-care services cannot be planned in advance, and individuals often do not know what they will have to pay in advance (they often do not know until they receive a bill, which is frequently months later). Moreover, individuals with serious illnesses will be more focused on obtaining the most effective care possible for their condition, and not on cost differences between providers.
4. Consumers also face difficulties in shopping effectively for many (but not all) types of health care. Care is sometimes required on an urgent basis, the nature of treatment often is not clear in advance, and quality is often variable and hard to observe in the moment. These all constitute barriers to effective consumer shopping, even if consumers have a financial incentive to obtain less expensive care. There is nonetheless some potential for consumer shopping. Consumers who have lower expenses are paying for part or all of their spending, so they have an incentive to shop. Moreover, consumers can shop for services that can be planned in advance and are readily comparable (e.g., diagnostic imaging). It has been estimated that shoppable services comprised 12 percent of private health-care spending in 2017 (Bloschichak, Milewski, and Martin 2020). While 12 percent is a relatively small proportion of the total, it nevertheless amounts to billions of dollars.
5. The HHI is equal to the sum of firms' squared market shares. It reaches a maximum of 10,000 when there is only one firm in the market. It gets smaller the more equal the firms' market shares are and the more firms there are in the market.
6. To be clear, concentration is not the same as competition. Markets measured as highly concentrated can nonetheless be competitive and vice versa. Nonetheless, in many markets greater concentration of market shares is associated with less competition, so highly concentrated markets and increasing concentration raise concerns about market power.
7. Fulton (2017) reports that 90 percent of Metropolitan Statistical Areas (MSAs) were highly concentrated for hospitals. The U.S. antitrust enforcement agencies define an HHI of 2,500 or above as highly concentrated (FTC and DOJ 1992). Zack Cooper, Stuart Craig, Charles Gray, John Van Reenen, and I have calculated that in 62 percent of areas in the country containing 20 percent of the U.S. population, the largest health system has over 50 percent of the market (unpublished calculations).
8. Wollmann (2018) shows that a change in the Hart-Scott-Rodino reporting thresholds led to many transactions not being reported to the agencies, and therefore for most of those transactions to escape antitrust scrutiny.
9. These include estimates of price increases of up to 64.9 percent due to the Evanston Northwestern–Highland Park merger in the Chicago area, 44.2 percent due to the Sutter–Summit merger in the San Francisco Bay area, and 65.3 percent due to the merger of the Cape Fear and New Hanover hospitals in Wilmington, North Carolina.
10. Other studies of hospital merger effects include Dafny (2009), who finds that mergers led to a cumulative 46 percent increase in prices from 1989 to 1997; Vita and Sacher (2001), who find price increases of 23 percent and 17 percent at merging hospitals in Santa Cruz, California; Krishnan (2001), who finds that merging hospitals increased prices 16.5 and 11.8 percent in Ohio and California, respectively; and Capps and Dranove (2004), who find that 9 of 12 hospital mergers they examined resulted in price increases greater than the median, ranging from 5 to 66 percent.
11. Other studies include Town and Vistnes (2001), who examine mergers among hospitals in Los Angeles and Orange Counties, California, where there are more than 120 hospitals between the two counties. They find that many of the mergers they examine would result in price increases of 5 percent or greater, in spite of the large number of hospitals in these counties. Capps, Dranove, and Satterthwaite (2003) examine a three-hospital merger in the southern suburbs of San Diego County, California, and find a price increase due to the merger of over 10 percent.
12. The Affordable Care Act requires that insurers spend a minimum percentage of premiums on medical expenses (minimum loss ratio). The intent was to provide insurers with an incentive to keep administrative costs and profits low and so reduce premiums, but the regulation also provides an incentive for higher medical expenses. Recent evidence by Cicala, Lieber, and Marone (2019) shows that the minimum loss ratio regulation led to increased medical expenses, but find no evidence of impacts on health insurance premiums.
13. Concentrated markets have fewer competitors or are dominated by a small number of competitors, such as one large hospital.
14. The testimony of Dr. Kenneth Kizer (2013) in a recent physician practice merger case (Federal Trade Commission and State of Idaho v. St. Luke's Health System, Ltd, and Saltzer Medical Group, P.A.) documents that clinical integration is achieved with many different forms of organization; in other words, consolidation is not necessary to achieve the benefits of clinical integration.
15. However, even workers with readily transferable skills can be harmed by a merger if the merged firm is the dominant employer overall in an area. Health care is the largest employment sector in many areas; where an area is dominated by a single health system that firm can be a dominant employer.
16. Prager and Schmitt (2019, 19) find, "post-merger annual wage growth (measured over the four years following the merger) is 1.1 percentage points slower for skilled workers and 1.7 percentage points slower for nursing and pharmacy workers than would be expected absent the merger."
17. Hospitals face more risk under diagnosis-related group payments, which are fixed and do not vary with the amount of services provided to patients, than with fee for service payments, which pay them for every service they provide.
18. This includes a number of programs, chief among them Medicaid and the State Children's Health Insurance Program.
19. Care is required, however, to make sure that standard setting is not used to harm competition (Organisation for Economic Co-operation and Development 2010).
20. See FTC n.d.b and DOJ n.d. for more information about the agencies and what they do. The FTC also has a consumer protection mission, while the DOJ does not.
21. It is common for the agencies to focus on separate markets in order to achieve specialized expertise and avoid duplication.
22. An example would be a health system acquisition of a physician practice that involved combining competing practices (e.g., Federal Trade Commission and State of Idaho v. St. Luke's Health System, Ltd and Saltzer Medical Group, P.A. 2017).
23. There is some concern that making provider and payer specific price information publicly available could facilitate collusion. While there is some research that speaks to this issue (Brown 2019a and 2019b finds that price transparency through an all payer claims database in the state of New Hampshire led to providers lowering their prices, not raising them), more evidence is needed.

24. Dranove and Lindrooth (2003) find that hospital mergers do not decrease costs in general, but that there are cost reductions when the merging hospitals unify their financial reporting and operate under a single license. They interpret this as evidence that integration is required for cost savings.
25. One source counts 166 rural hospital closures from 2005 to 2019 (Cecil G. Sheps Center for Health Services Research 2020).
26. The FTC has defined antitrust safety zones (DOJ and FTC 1996, Statement 1) for health-care markets that may prove helpful in considering which rural markets cannot support competition.



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## Highlights

In this paper, Martin Gaynor of Carnegie Mellon University describes the substantial consolidation that has occurred in health-care markets, showing that it has generally resulted in higher prices without gains in quality or other improvements. There are many health-care markets where competition can be effective, but the right policies are needed to support that competition. Gaynor proposes three types of policy reforms that would increase competition in health care and improve market functioning.

## The Proposal

**Reduce or eliminate policies that encourage consolidation or that impede entry and competition.** The health-care industry is highly regulated, and that can entail policies that either unintentionally encourage consolidation or impede market entry or competition. Policies related to certificates of need, any willing provider requirements, network adequacy regulations, certificates of public advantage, and occupational licensure need to be modified so that they are narrowly tailored to achieve their objectives.

**Strengthen antitrust enforcement so that federal and state antitrust enforcement agencies can act effectively to prevent and remove harms to competition.** Policymakers should increase funding for antitrust enforcement by a third, or \$157 million per year; eliminate certain policies that limit antitrust enforcement; and create a specialized court to hear all antitrust cases. Antitrust enforcement agencies should continue to block anticompetitive horizontal mergers, do more to address anticompetitive practices like anti-tieing and anti-steering, and conduct research on antitrust harms from certain health-care practices.

**Create a federal agency responsible for monitoring and overseeing health-care markets, and give that agency the authority to flexibly intervene when markets are not working.** The agency will be particularly valuable for addressing problems in health-care markets that cannot reasonably be solved through enhanced competition.

## Benefits

The health-care sector is one of the most important parts of the U.S. economy, both in terms of size and impact on our lives. But the U.S. health-care system does not operate efficiently and health-care markets are often uncompetitive. While there is no single policy that will address all of the health-care system's ills, Gaynor proposes a suite of pro-competition policies that would lower health-care costs without impairing quality.



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