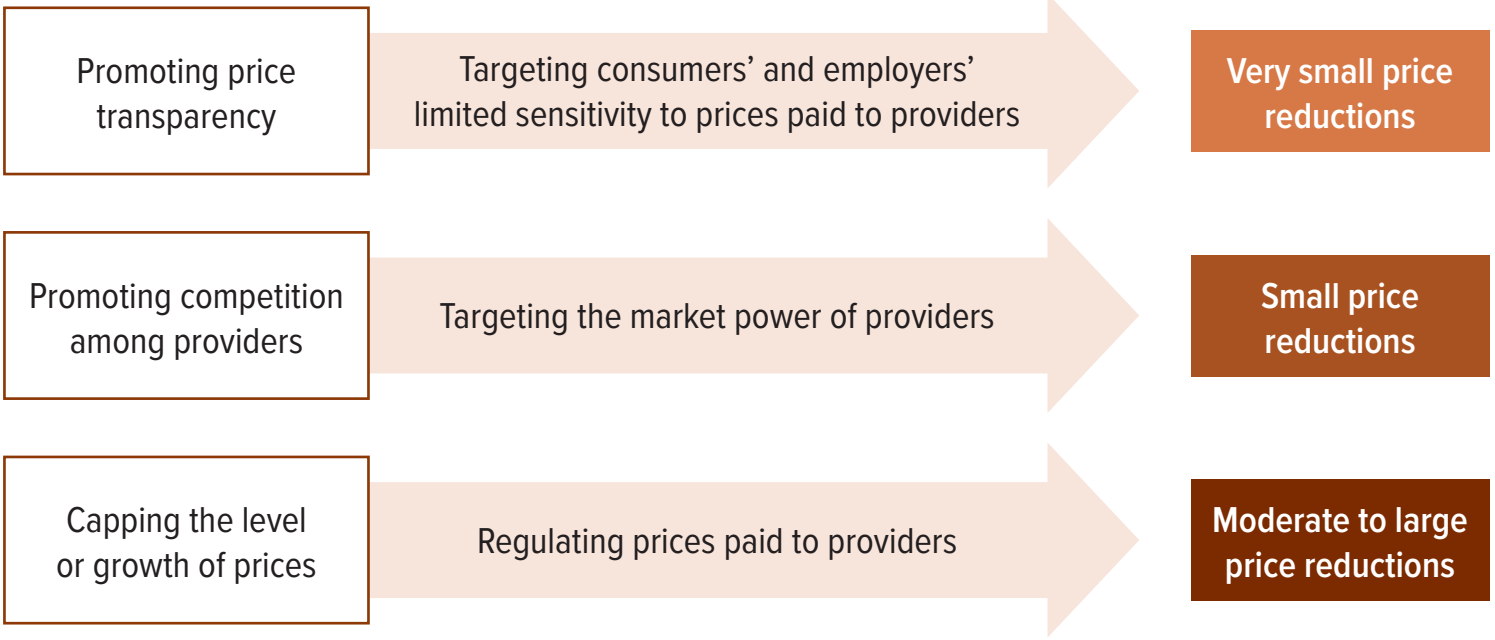
Congressional Budget Office
Nonpartisan Analysis for the U.S. Congress

Policy Approaches to Reduce What Commercial Insurers Pay for Hospitals' and Physicians' Services



SEPTEMBER | 2022

At a Glance

The prices that commercial health insurers in the United States pay for hospitals' and physicians' services are much higher, on average, and have been rising more quickly than the prices paid by public health insurance programs. Those rising prices—rather than growth in the per-person use of health care services—are an important driver of recent increases in premiums for commercial health plans. Higher premiums in turn increase the amount that individuals and employers pay for health insurance coverage and increase total federal subsidies for commercial health insurance. In this report, the Congressional Budget Office describes policy approaches available to the Congress that would reduce the prices that commercial insurers pay providers and thereby reduce premiums for that coverage.

Factors That Lead to High Prices. The prices that providers negotiate with commercial insurers are high because of several factors, including hospitals' and physicians' market power and consumers' and employers' lack of sensitivity to those prices.

How Federal Legislation Can Address High Prices. Government policies can reduce commercial insurers' prices for providers by targeting the factors that contribute to high prices, although many of the causes of those factors are not amenable to change by legislative action. The government can also reduce prices through regulation. By reviewing state laws, draft federal legislation, policy proposals, and published articles, CBO identified three broad policy approaches available to the Congress:

- Promoting competition among providers, which would aim to reduce prices by targeting providers' market power;
- Promoting price transparency, which would aim to reduce prices by targeting consumers' and employers' price sensitivity; and
- Capping the level or growth rate of prices, which would aim to reduce prices by regulating them.

Effects on Prices. In CBO's assessment, price-cap policies could have the largest effects on prices. Depending on the design of the caps, adopting the most comprehensive set of price-cap policies included in this analysis would reduce prices either by a moderate amount (from more than 3 percent to 5 percent) or by a large amount (more than 5 percent) in the first 10 years after the policies were enacted, relative to the trajectory of prices under current law. Adopting all of the provider-competition policies in this analysis would reduce prices by a small amount (from more than 1 percent to 3 percent), and adopting all of the price-transparency policies would reduce prices by a very small amount (0.1 percent to 1 percent). Those amounts reflect anticipated effects in a given year once policies had been fully implemented and stakeholders had fully adjusted to them. Each approach might have larger effects beyond the first 10 years, but those longer-term effects are more uncertain.

Implications for the Federal Budget. Each of the three policy approaches would reduce the federal deficit. In CBO's assessment, commercial insurers would pass most of their savings from paying lower prices on to customers by reducing premiums (because of competition among insurers, insurance regulations, and other factors), thus decreasing federal subsidies for health insurance.

Other Potential Effects. Lowering the prices paid by commercial insurers would have other effects as well, such as reducing income for some providers and improving financial outcomes for people with commercial health insurance. It could also result in decreases in some aspects of the quality of health care and patients' access to care.

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Notes

In this report, commercial health insurance consists of both employment-based insurance and nongroup (individually purchased) plans.

Providers are hospitals and physicians, unless this report specifies otherwise. Data sources that report spending and prices for physicians' services may also include services provided by other health care professionals, such as nurse practitioners and physician assistants.

The prices paid by commercial insurers reflect the actual amounts paid to providers (known as allowed amounts), not providers' billed charges (known as list prices).

Unless this report notes otherwise, estimates of price reductions reflect the effects that the Congressional Budget Office anticipates would occur in a given year within the first decade after policies were enacted, once the policies had been fully phased in and all affected parties had adjusted to them.

Unless this report indicates otherwise, all years referred to are calendar years.

Numbers in the text and figures may not add up to totals because of rounding.

Summary

More than 60 percent of the U.S. population under the age of 65 receives health insurance coverage from commercial plans, which are purchased through employers or individually.[1] Commercial health insurers pay hospitals and physicians much higher prices, on average, than public health insurance programs in the United States do, as well as higher prices than both commercial insurers and public payers in other countries do. Those high prices for providers contribute to high premiums for commercial health insurance in the United States. The high premiums are borne both by the individuals and employers who purchase commercial insurance and by the federal government, which subsidizes the cost of that coverage. One strategy for lowering health insurance premiums—and reducing federal subsidies for them—is to lower the prices that commercial insurers pay providers.

In this report, the Congressional Budget Office describes policy approaches that the Congress could consider to reduce the prices that commercial insurers pay for hospitals' and physicians' services. The report explains CBO's assessments of the extent to which prices would be lower under each approach than they would be under current law. The price reductions are characterized as very small (0.1 percent to 1 percent), small (more than 1 percent to 3 percent), moderate (more than 3 percent to 5 percent), or large (more than 5 percent). CBO assessed what the size of those price effects would be in the first 10 years after a given set of policies had been enacted, once those policies had taken full effect and stakeholders such as insurers, providers, patients, and employers had fully adjusted to the changes.

CBO chose the policy approaches to analyze by reviewing recent state laws, draft federal legislation, policy proposals, and published articles about ways to reduce commercial insurers' prices for providers and by consulting with relevant experts. CBO focused on policies that would fall within the historical purview of the Congress and that would have the primary purpose of lowering prices or addressing the underlying factors that lead to high prices.

1. See Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People Under 65: 2022 to 2032* (June 2022), www.cbo.gov/publication/57962.

Lawmakers have a limited ability to reduce commercial insurers' prices for hospitals' and physicians' services by targeting factors that cause those prices to be high. The prices that commercial insurers pay are determined through negotiations with providers. Those negotiations often lead to high prices because of providers' market power (the ability to command higher prices than would prevail in a perfectly competitive market) and because of a lack of price sensitivity among insurers, which reflects insensitivity to prices among the consumers and employers who select their plans. Some of the underlying causes of high prices could be mitigated using policy approaches that could be implemented by legislation. But many other causes are inherent to the structure of the U.S. health care system or are not amenable to change by policy. As a result, the policies available to the Congress to target factors that lead to high prices could reduce prices by at most a small percentage. Because health care accounts for a significant portion of federal spending, however, even small reductions in those prices would result in sizable savings on federal subsidies for commercial health insurance.

CBO grouped the policies in this analysis into three broad approaches according to the mechanisms they would use to lower the prices paid by commercial insurers (see Table S-1). Two of the approaches would reduce prices by addressing some of the factors that contribute to high prices; the third approach would reduce prices by regulating them.

Policies That Promote Competition Among Providers

The first set of policies that CBO examined would reduce the prices that commercial insurers pay providers by targeting the market power of hospitals and physicians in four ways:

- Increasing antitrust enforcement,
- Reducing providers' incentives to consolidate,
- Making it easier for providers to change jobs, and
- Prohibiting anticompetitive contracts between insurers and providers.

Table S-1.

Effects of Federal Policy Approaches on the Prices That Commercial Health Insurers Pay for Hospitals' and Physicians' Services

		Effects on Prices[a]	
Policy Approach	**Mechanism**	**Within the First 10 Years After Enactment**	**Over the Longer Term**
Promoting Competition Among Providers	Targeting the market power of providers	Small price reductions	Possible larger price reductions than in the first 10 years
Promoting Price Transparency	Targeting consumers' and employers' limited sensitivity to prices paid to providers	Very small price reductions	Possible larger price reductions than in the first 10 years
Capping the Level or Growth of Prices	Regulating prices paid to providers	Moderate to large price reductions	Continued moderate to large price reductions

Data source: Congressional Budget Office.

a. In this report, "very small" means a reduction of 0.1 percent to 1 percent; "small" means a reduction of more than 1 percent to 3 percent; "moderate" means a reduction of more than 3 percent to 5 percent; and "large" means a reduction of more than 5 percent. The price effects shown here are the reductions CBO anticipates in a given year after the policies have been fully implemented and all parties have fully adjusted to them.

In CBO's assessment, adopting all of those policies would reduce the prices that commercial insurers pay providers by a small percentage (from more than 1 percent to 3 percent) in the first decade, relative to what CBO estimates those prices would be during that period under current law. That assessment is based on estimates of how prices respond to changes in the concentration of market share among a few providers and the extent to which those policies would affect competition among providers. However, there is limited evidence about the degree to which market concentration would be slowed or reduced under most of the policies. And even slight changes in the policies' design or implementation could dramatically alter their effects on prices. Given that uncertainty, the actual effects could be larger or smaller than CBO anticipates.

Policies That Promote Price Transparency

The second set of policies would reduce commercial insurers' prices for providers by targeting consumers' and employers' sensitivity to those prices. That approach includes two types of policies:

- Expanding or refining existing federal regulations that require hospitals and insurers to make their prices available to the public, and
- Establishing a federal all-payer claims database (APCD) and providing standardized information about prices for health care services using that database.

Adopting both types of policies would reduce prices by a very small percentage (0.1 percent to 1 percent) in the first 10 years relative to their trajectory under current law, in CBO's assessment. CBO based that assessment on estimates from a study of New Hampshire's experience with an APCD and a public reporting website and adjusted those estimates to account for services that would not be affected under these policies, the later time period, and other factors. However, some aspects of that study are difficult to generalize, and studies of patients' responses to price information in other settings have generally found smaller effects. Given that uncertainty, the actual effects could be larger or smaller than CBO anticipates.

Policies That Cap the Level or Growth of Prices

The third set of policies would reduce the prices that commercial insurers pay for hospitals' and physicians' services by regulating those prices in various ways:

- Capping the level of prices by setting maximum amounts that hospitals and physicians could receive from commercial insurers,

- Capping the annual growth rate of those prices, or
- Taxing services whose prices exceed certain maximum amounts.

In CBO's assessment, adopting the most comprehensive set of those policies—capping both the level and annual growth of prices in all markets—would decrease prices by a moderate percentage (from more than 3 percent to 5 percent) or by a large percentage (more than 5 percent) in the first decade compared with the projected path of prices under current law. The exact size of that reduction would depend on the level of the caps and other features of the policies.

Effects of the Policies on the Budget and Other Outcomes

Each of the three broad policy approaches described in this report would reduce the federal budget deficit. They would do so mainly by lowering federal subsidies for health insurance premiums in various ways: by increasing tax revenues (because the amount of premiums excluded from taxable income would be lower), by reducing premium tax credits for people who buy insurance through the marketplaces established under the Affordable Care Act, and by reducing subsidies for health insurance for some self-employed people. In CBO's assessment, most of the price reductions resulting from those policy approaches would ultimately be passed along to individuals in the form of lower insurance premiums and higher taxable wages.

The effects on prices and the federal budget could differ depending on the legislative details of any specific policy or group of policies. CBO does not describe the separate effects of each individual policy discussed in this report, and some policies would have little effect on the deficit if adopted in isolation. Some of the policies would also have other effects on the budget, but the net result of each broad approach, if adopted in its most comprehensive form, would be to reduce the deficit.

The three policy approaches would have other effects as well, including reductions in income for providers and improved financial outcomes for people with commercial health insurance. The effects of the policy approaches on the quality of health care and patients' access to care are uncertain. Some aspects of health care quality and access could worsen with lower prices, and other aspects might improve. In addition, price reductions under some of the policies might be too small to have any effect on health care quality or access.

Other types of policies might reduce premiums for commercial health insurance—and federal subsidies for those premiums—by targeting people's use of health care services or health care spending (which reflects both the price and the use of services). Such policies include requiring hospitals to adopt fixed, all-inclusive budgets and accelerating the adoption of other alternative payment models, such as accountable care organizations or bundled payments. CBO did not include such policies in this report because they do not primarily target prices for providers. Limiting the use of costly existing technologies or the price of new technologies is another strategy for reducing health care spending and premiums for commercial insurance. CBO does not discuss those types of policies in this report, which focuses on ways to reduce prices that apply to both existing and new medical services.

Chapter 1: Understanding the High Prices That Commercial Health Insurers Pay Providers

Most people in the United States under age 65 are enrolled in a commercial health plan as their primary source of health insurance coverage. In 2022, almost 160 million people obtained commercial insurance through an employer, and about 17 million purchased coverage themselves in the nongroup market.[1]

By several measures, the prices that commercial insurers pay for hospitals' and physicians' services are high and rising. Such price growth has consequences for individuals: It can lead to higher insurance premiums, lower wages, increases in cost-sharing requirements for patients, and reductions in the scope of insurance benefits. Price growth also has consequences for the federal budget because it increases the federal government's subsidies for commercial health insurance.

Through its analysis and review of the research literature, the Congressional Budget Office has identified three main factors underlying the high prices paid by commercial insurers: providers' market power, consumers' limited sensitivity to the prices they pay for hospitals' and physicians' services, and employers' limited sensitivity to those prices. A lack of price sensitivity among insurers, which primarily reflects the lack of sensitivity among consumers and employers, also contributes to high prices. Most of the policy approaches that are the focus of this report would aim to lower the prices paid by commercial insurers by targeting one or more of those factors. (The policy approaches are discussed in Chapter 2.)

Levels, Trends, and Variation in Prices

Compared with the prices paid by the Medicare fee-for-service (FFS) program and by commercial insurers in other countries, the prices that commercial insurers in the United States pay for hospitals' and physicians' services are high. They also vary substantially among different areas and among providers in the same area. Large variation in prices for the same or similar services can occur for many reasons, but it is often evidence of market failures—that is, conditions that result in the inefficient use of resources to purchase and deliver health care services.

In a recent literature review, CBO found that providers' market power was a key reason for variation in the prices that commercial insurers pay for hospitals' and physicians' services across the United States.[2] Some evidence suggested that two other factors played a lesser role: the prices of inputs needed to deliver those services (such as the cost of supplies and materials, the wages of nurses and other staff, and the costs of medical facilities and equipment) and the quality of services. CBO's analysis and review of the literature found no evidence that the share of providers' patients covered by Medicare or Medicaid played any part in price variation in most settings.

Level of Prices

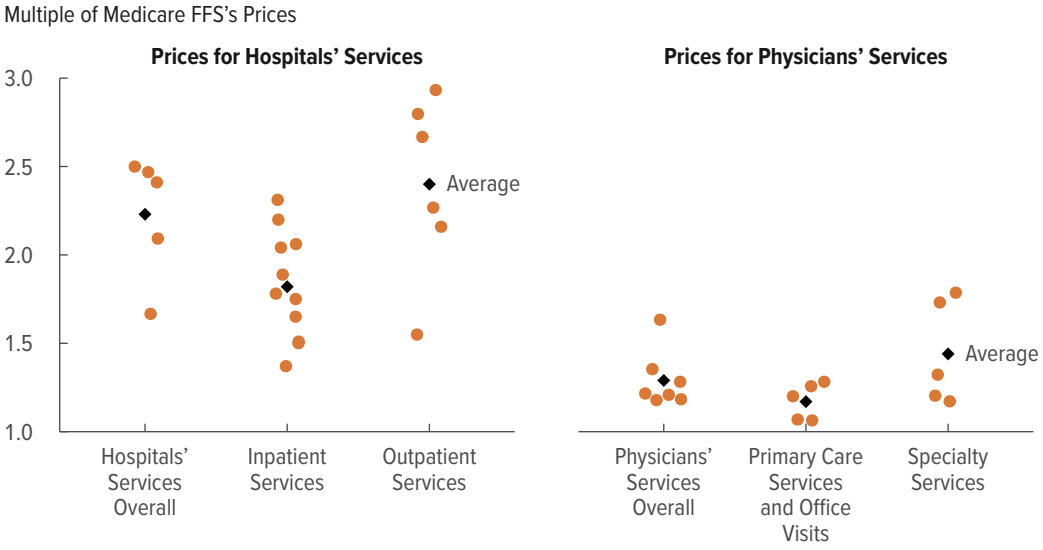
In recent years, commercial insurers paid higher prices, on average, for both hospitals' and physicians' services than Medicare FFS paid, but those price differences were substantially larger for hospitals' services than for physicians' services. In a previous review of studies published between 2010 and 2020, CBO estimated that the prices that commercial insurers paid for hospitals' services overall were more than twice the prices that Medicare FFS paid—2.4 times Medicare FFS's prices for hospitals' outpatient services, on average, and 1.8 times those

1. See Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People Under 65: 2022 to 2032* (June 2022), www.cbo.gov/publication/57962. Nongroup plans are purchased directly from insurance companies by individuals.

2. See Congressional Budget Office, *The Prices That Commercial Health Insurers and Medicare Pay for Hospitals' and Physicians' Services* (January 2022), www.cbo.gov/publication/57422.

Figure 1-1.

Estimates of Commercial Insurers' Prices for Providers Relative to the Medicare Fee-for-Service Program's Prices



On average, commercial insurers paid more than double the prices that Medicare FFS paid for hospitals' services overall and about one-quarter more than Medicare FFS for physicians' services overall.

Data source: Congressional Budget Office, using estimates from published studies. See www.cbo.gov/publication/58222#data.

Each point in the figure represents a study's estimate of the average price paid by commercial insurers relative to Medicare FFS's prices for hospitals' or physicians' services. CBO calculated a simple average of the studies' results within each of the six service categories. For a list of those studies and details about their methods, see Appendix B in Congressional Budget Office, *The Prices That Commercial Health Insurers and Medicare Pay for Hospitals' and Physicians' Services* (January 2022), www.cbo.gov/publication/57422.

FFS = fee for service.

prices for hospitals' inpatient services (see Figure 1-1).[3] The average prices paid by commercial insurers for physicians' services overall were 1.3 times the prices paid by Medicare FFS—1.4 times Medicare FFS's prices for specialty physicians' services and 1.2 times those prices for primary care and office visits. (Those differences account for adjustments to prices paid by Medicare based on the setting in which a service is provided and the complexity of that service.)

In addition, several studies have concluded that the prices paid by commercial insurers in the United States are substantially higher than the prices paid by both private insurers and public health insurance programs in other advanced economies, on average.[4] The authors of those studies found that spending for health care was much higher in the United States than in other countries despite similar inputs and levels of health care utilization, which indicates that U.S. prices are higher.[5]

3. Ibid.

4. See, for instance, Gerard F. Anderson, Peter Hussey, and Varduhi Petrosyan, "It's Still the Prices, Stupid: Why the U.S. Spends So Much on Health Care, and a Tribute to Uwe Reinhardt," *Health Affairs*, vol. 38, no. 1 (January 2019), pp. 87–95, https://doi.org/10.1377/hlthaff.2018.05144; Irene Papanicolas, Liana R. Woskie, and Ashish K. Jha, "Health Care Spending in the United States and Other High-Income Countries," *JAMA*, vol. 319, no. 10 (March 13, 2018), pp. 1024–1039, https://doi.org/10.1001/jama.2018.1150; and Jose F. Figueroa and others, "International Comparison of Health Spending and Utilization Among People With Complex Multimorbidity," *Health Services Research*, vol. 56, no. S3 (December 2021), pp. 1317–1334, https://doi.org/10.1111/1475-6773.13708.

5. Other researchers have found that U.S. commercial insurers generally pay higher average prices than private health insurers in other countries by directly comparing price data collected by the International Federation of Health Plans (iFHP). See, for example, John Hargraves, "International Comparisons of Health Care Prices From the 2019 iFHP Study" (Health Care Cost Institute, July 20, 2022), https://tinyurl.com/25vsptmt. Such direct comparisons of prices may be problematic, however, because of differences among countries in what settings health care services are provided in, how those services are paid for, and how representative the private payers included in each country's data are of other private payers in the same nation.

Finally, several other studies have shown that the prices private insurers can negotiate to pay for hospitals' and physicians' services in their Medicare Advantage and Medicaid managed care plans are substantially lower than the prices those same insurers pay for similar services in their commercial plans. Those differences may be attributable in part to the bargaining power that insurers gain from the existence of those public programs.[6]

Growth of Prices

Between 2013 and 2018, commercial insurers' prices for hospitals' and physicians' services combined grew at an average rate of 2.7 percent per year, CBO estimates.[7] That growth rate was about 1 percentage point higher than average yearly inflation during that period, as measured by the gross domestic product price index. By comparison, the prices paid by the Medicare FFS program, which are updated regularly by statute and regulation, increased at an average rate of 1.3 percent per year for an analogous set of services. The rapid growth of prices paid by commercial insurers was the primary factor driving increases in those insurers' spending per person.

Variation in Prices Among and Within Areas

Many studies have found substantial variation in the prices that commercial insurers pay in different geographic areas, to different providers in the same area, and even among different insurers for services provided by the same hospital or provider group. In most studies, those findings have been based on prices for a narrowly defined or standardized service, such as a specific type of diagnostic imaging or knee replacement.

Some geographic variation in prices for the same service is to be expected given differences in the prices of inputs necessary to deliver care, such as the wages of nurses, doctors, and other staff. Indeed, Medicare adjusts payments by geographic area to account for such differences. However, the fact that price variation among commercial insurers greatly exceeds price variation in Medicare FFS suggests some degree of market inefficiency, including the ability of some providers to command prices far exceeding their costs.[8] Moreover, those higher prices are typically not a result of cost shifting (that is, providers do not negotiate higher prices from commercial insurers in response to lower payments from public programs), according to an analysis and literature review by CBO.[9]

Factors That Lead to High Prices

The high prices that commercial insurers pay for hospitals' and physicians' services result from several factors, primarily the market power of providers and the limited sensitivity of consumers and employers to those prices. Other factors—such as providers' input prices, the quality of their services, and the lower prices paid by public programs—have substantially less impact on prices, in CBO's assessment. Limited price sensitivity on the part of insurers also contributes to high prices, but it mainly results from price insensitivity among consumers and employers.

Those various factors limit insurers' incentives to bargain for lower prices when they negotiate with providers. In particular, providers with market power can credibly threaten to stay out of an insurer's network and still maintain their market share, which strengthens their ability to negotiate higher prices with insurers.[10] Insurers could push back against those higher prices, but their incentives to do so are lessened if the consumers and employers who purchase their plans are largely insensitive to prices.

6. See Daria M. Pelech, "Prices for Physicians' Services in Medicare Advantage and Commercial Plans," *Medical Care Research and Review*, vol. 77, no. 3 (June 2020), pp. 236–248, https://doi.org/10.1177/1077558718780604; Jared Lane K. Maeda and Lyle Nelson, "How Do the Hospital Prices Paid by Medicare Advantage Plans and Commercial Plans Compare With Medicare Fee-for-Service Prices?" *Inquiry*, vol. 55 (January 2018), https://doi.org/10.1177/0046958018779654; Erin Trish and others, "Physician Reimbursement in Medicare Advantage Compared With Traditional Medicare and Commercial Health Insurance," *JAMA Internal Medicine*, vol. 177, no. 9 (July 2017), pp. 1287–1295, https://doi.org/10.1001/jamainternmed.2017.2679; and Government Accountability Office, *Medicaid Financing: States' Increased Reliance on Funds From Health Care Providers and Local Governments Warrants Improved CMS Data Collection*, GAO-14-627 (July 29, 2014), www.gao.gov/products/gao-14-627.

7. That estimate is based on CBO's analysis of data from the Health Care Cost Institute. At the time of CBO's analysis, the most recent year for which data were available was 2018. See Congressional Budget Office, *The Prices That Commercial Health Insurers and Medicare Pay for Hospitals' and Physicians' Services* (January 2022), www.cbo.gov/publication/57422.

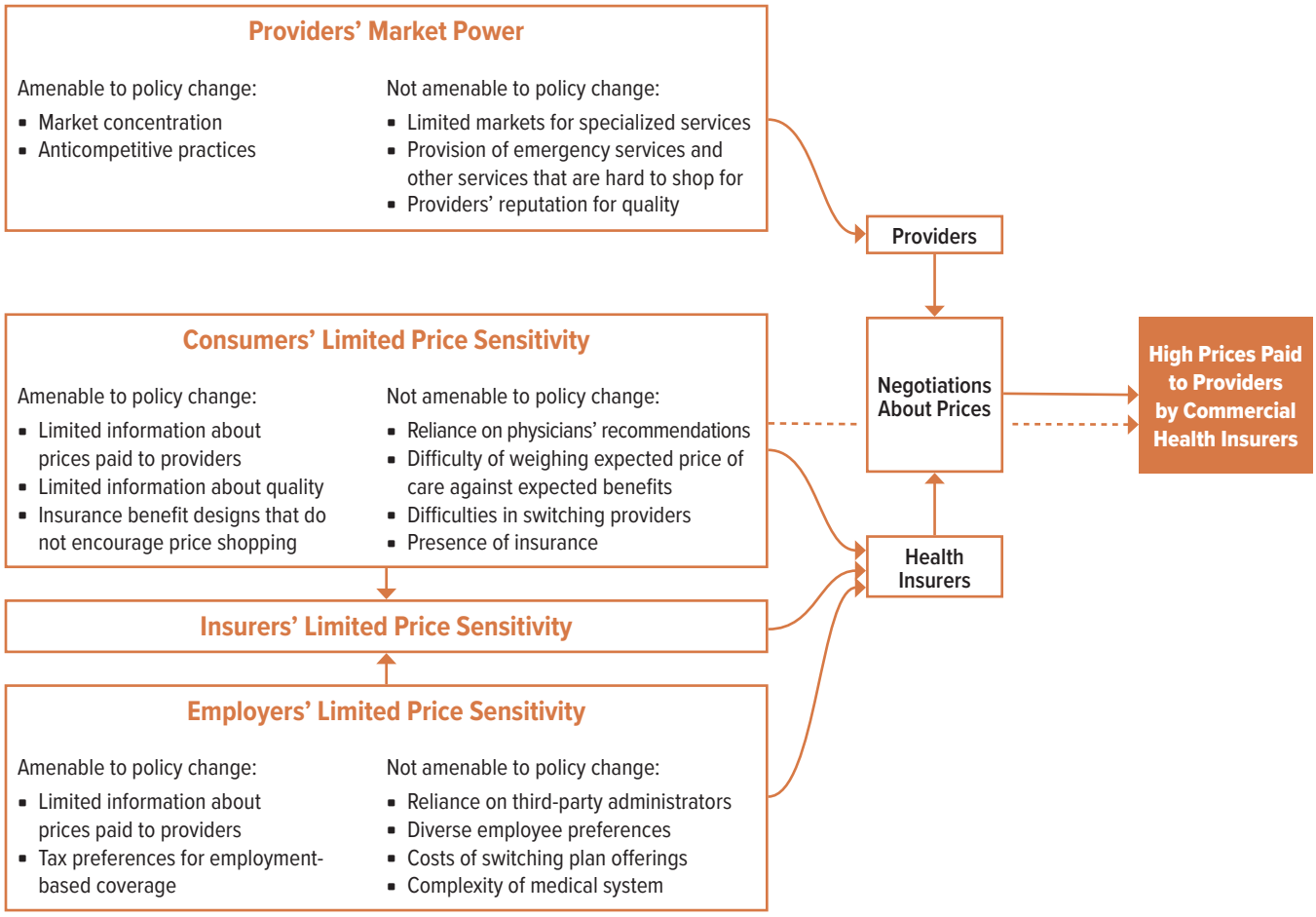
8. Ibid.

9. Ibid.

10. A health insurance network consists of providers that have contracted with an insurer to provide care to enrollees in the insurer's plan.

Figure 1-2.

Factors Contributing to the High Prices That Commercial Insurers Pay for Hospitals' and Physicians' Services



Data source: Congressional Budget Office.

Many of the policies that aim to reduce commercial insurers' prices for hospitals' and physicians' services target the factors that underlie those prices. However, lawmakers' ability to influence prices by targeting those factors depends on whether the causes of those factors are amenable to change by federal policy (see Figure 1-2).

Providers' Market Power

Among hospitals and physicians, the ability to raise prices above those that would prevail in a perfectly competitive market can stem from several sources, including the concentration of market share among only a few providers, contracts that reduce competition, and the status of particular providers. Some of those sources of market power can be altered by changes in government policy, but others cannot.

Market Concentration. The extent to which a few providers control a large share of a given market is an important source of market power for providers. As insurers and providers negotiate over prices for services, each side's negotiating leverage is determined by the alternatives that the other side has to reaching an agreement. An insurer has more bargaining leverage if a provider has few good alternatives to being part of that insurer's network. Similarly, a provider has more leverage if an insurer has few good alternatives to having that provider in its network. Controlling a large share of the market can increase market power for providers because it leaves insurers with fewer viable alternatives.

Markets for hospitals' and physicians' services in the United States have become more concentrated over time.

For instance, the percentage of metropolitan statistical areas whose markets for primary care physicians were considered highly concentrated under the definition used by the Antitrust Division of the Department of Justice increased from 20 percent in 2010 to 39 percent in 2016.[11] The trend toward more consolidated markets partly reflects an increase in mergers among hospitals and consolidation of physicians' practices into larger groups (which can also occur when hospitals acquire physicians' practices). Attrition among smaller practices has also played a role, as solo physicians have retired and new physicians have joined larger practices.[12]

In addition, markets have become more concentrated than they would be otherwise because of barriers to entry. Some barriers are related to the fixed costs of establishing a hospital or receiving the training necessary to become a physician. Others, such as accreditation, are designed to protect patients. But others, such as noncompete clauses, are designed mainly to reduce providers' ability to change jobs and compete against their former employer.[13]

The academic research that CBO reviewed consistently found a strong positive relationship between measures of market concentration for hospitals' and physicians' services and the prices paid by commercial insurers. Providers' market concentration can be targeted by policies that slow the growth of concentration, make markets less concentrated, or both.

Anticompetitive Contracts. Established providers may take active measures to maintain or improve their market position by negotiating contracts with insurers that contain anticompetitive elements. In many cases, those contracts restrict insurers from giving their enrollees incentives to use lower-priced or higher-quality providers. Outlawing such clauses or limiting the circumstances in which they can be used would be ways to curb providers' anticompetitive practices.

Providers' Status. Providers gain market power in various ways, including by having a reputation for quality, by delivering highly specialized services, or by providing services that consumers do not typically shop for. (Such "unshoppable" services include emergency services and ambulance transport, which often need to be provided urgently, and anesthesiology and pathology services delivered in hospitals, which are ancillary to another service a patient is receiving.) Those various sources of market power can give providers "must-have" status. Such status can increase providers' negotiating leverage with insurers if the insurers believe that including those providers in their networks is essential for attracting consumers and employers to their plans.

Unlike other causes of market power, providers' reputation and their delivery of specialized or unshoppable services are generally not amenable to change by government policy. For example, given the small number of patients who use specialized services and the natural barriers to entry for certain specializations (such as the extensive training needed), it is more efficient for a smaller set of providers to deliver a larger volume of those services, which decreases the cost per service. In addition, the quality of specialized services is often improved when a smaller number of providers each deliver a larger volume of services.

Purchasers' Limited Sensitivity to Prices

Another factor underlying the high prices paid by commercial insurers is consumers' and employers' limited sensitivity to the prices they pay for hospitals' and physicians' services. Limited price sensitivity on the part of insurers also contributes to those high prices, but in CBO's assessment, it largely reflects the price insensitivity of the consumers and employers that are their customers.

Health Care Consumers. Prices for hospitals' and physicians' services tend to play a smaller role in consumers' decisions about where to seek and purchase care than prices for other goods and services play in people's other purchasing decisions. That limited price sensitivity largely reflects aspects of the way medical care is delivered in the United States that are not amenable to change by government policy, such as the following:

11. See Congressional Budget Office, *The Prices That Commercial Health Insurers and Medicare Pay for Hospitals' and Physicians' Services* (January 2022), www.cbo.gov/publication/57422. A metropolitan statistical area is a geographic area that generally consists of one or more cities and the surrounding population.

12. See Carol K. Kane, *Recent Changes in Physician Practice Arrangements: Private Practice Dropped to Less Than 50 Percent of Physicians in 2020* (American Medical Association, May 2021), https://tinyurl.com/tn4rwjc3 (PDF).

13. Noncompete clauses are agreements in employment contracts that restrict people from working for a competitor or starting a competing business interest for some period after leaving their employer.

- Patients rely on the expert advice of physicians and other health care professionals when deciding what care to obtain.[14] Providers generally do not prioritize saving money for patients or insurers, and they may benefit from referring patients to higher-priced providers. Such referrals may be particularly likely when the referring physicians and the other providers of ancillary services are employed by the same entity.
- Patients cannot easily weigh the expected price of getting care against the expected benefits it will provide, which makes it difficult for them to determine the value of a given service.
- Some patients are reluctant to switch to a lower-priced provider because establishing a relationship with a new provider can be laborious. For example, patients might have to request that their medical records be sent to the new provider—and even then, the new provider's knowledge of the patients' preferences and health history may be limited.
- Many patients are insensitive to prices because insurance shields them from most price variation. For instance, many patients pay a flat copayment for a given service, such as an office visit, regardless of the price the insurer pays to the provider. And in many cases, out-of-pocket maximums shield users of the highest-cost services from prices. Changes to the design of insurance benefits could make people more sensitive to prices, but patients' coverage would still generally protect them from a large share of the costs of health care services. (See Appendix A for a discussion of how reducing tax preferences for employment-based insurance would encourage the use of insurance benefit designs that make people more sensitive to prices.)

Other sources of consumers' price insensitivity reflect characteristics of the U.S. health care system or existing policies that are amenable to policy changes. One such source is a lack of information about the prices and quality of services. Even when price information is readily available, it can be difficult for patients to interpret, for several reasons. It is typically limited to a subset of individual services rather than to a bundle of services, such as all services related to a knee replacement. In many cases, it is not presented in a way that accounts for patients' insurance coverage, such as whether patients have a high-deductible health plan and how close they are to meeting their deductible. And it requires consumers to interpret the information themselves, with little recourse to ask questions or gain additional information.

Even when price shopping is possible, consumers may not select the lowest-priced provider. In markets where the quality of services is uncertain and where poor quality can have significant consequences, patients may view higher prices as a sign of higher quality. Such behavior may be reinforced by insurance plans that do not reward patients for using lower-priced providers. (Plans can create such rewards by, for example, using reference pricing, in which the insurer pays a flat rate for a given service and patients bear the additional cost of going to a higher-priced provider).

Consumers' price insensitivity has two key implications for the prices paid to providers. First, for any given set of negotiated prices, it causes patients to use higher-priced providers, on average, than they would if price were a greater consideration. Second, it makes insurers—whose plans partly reflect consumers' (and employers') preferences and values—less sensitive to high and rising prices when negotiating with providers.

Employers. Because employers provide coverage to most people with commercial health insurance, their decisions determine the options that many people have for coverage and the prices they face when seeking care. In many cases, those prices are high because employers, like consumers, tend to be insensitive to prices for hospitals' and physicians' services. That insensitivity manifests in two ways. First, other than through any effects on premiums, the prices paid to providers typically have little effect on employers' choice of health insurance plans. Second, employers typically rely on other entities, such as benefit consultants, to negotiate with insurers.

In some cases, employers' insensitivity to prices for hospitals' and physicians' services stems from the same sources as consumers' price insensitivity. For example, the information about those prices that is available to employers tends to be limited, even though such prices affect how much employers or their employees pay for premiums. That incomplete information results partly from employers' reliance on insurers or other entities to negotiate prices and partly from employers' difficulty observing the prices negotiated between other employers

14. See Michael Chernew and others, *Are Health Care Services Shoppable? Evidence From the Consumption of Lower-Limb MRI Scans*, Working Paper 24869 (National Bureau of Economic Research, January 2019), www.nber.org/papers/w24869.

and providers, which until recently have been considered trade secrets. Moreover, because the share of premiums that employers pay is generally excluded from their workers' taxable income, employers have less incentive to seek more complete information.

In other cases, the reasons for employers' price insensitivity differ from the reasons for consumers' price insensitivity and are less amenable to change by government policy. For example, employers' decisions about insurance coverage reflect the diverse preferences of their employees, and employers may prioritize the preferences of workers who would be adversely affected by a change in insurance plans or networks.[15] Such preferences can make it challenging for employers to lower the prices paid to providers by, for instance, offering plans that exclude high-priced providers or have narrow networks, particularly when employers are trying to arrange coverage for workers spread across broad geographic areas. Employers may also be concerned that introducing plans with new benefit designs or reduced access to certain providers or benefits would upset their workers and make the employers less competitive in the labor market.[16] Such considerations—along with the administrative complexity of switching plans—make it costly for employers to change the plans they offer to include benefit designs that encourage the use of lower-priced providers.

Most employers' responses to the prices paid to providers are also blunted because employers lack the expertise and time needed to navigate a complex medical system. In CBO's assessment, small employers tend to face the greatest challenges in navigating that system, but larger employers with more resources face difficulties as well. As a result, employers' roles in designing provider networks for plans, negotiating prices, and processing claims are almost always outsourced to consultants or third-party administrators. Those entities do not realize the full gains from negotiating lower prices, so they have little incentive to do so.

Health Insurers. The persistently high and rising prices paid by commercial insurers for hospitals' and physicians' services could also be explained by insurers' own insensitivity to the prices they pay. But in CBO's assessment, that insensitivity is largely a reflection of consumers' and employers' price insensitivity. Demand for health insurance tends to be inelastic, meaning that consumers and employers do not reduce insurance purchases by a large amount, or at all, when premiums rise to reflect higher prices. If those groups were more sensitive to prices and premiums, insurers would be more likely to take steps to reduce or slow the growth of the prices they pay providers to avoid losing market share.

Insurers' limited sensitivity to prices for hospitals' and physicians' services may also stem in part from their ability to increase revenues and profits when those prices rise. For example, insurers that provide only administrative services to self-insured employers may set their fees as a percentage of spending on claims; if everything else stayed the same, higher prices would increase health care spending and thus those insurers' profits.[17]

In addition, insurers that sell coverage in the fully insured and nongroup markets may accept paying higher prices to providers because of legal requirements implemented in 2012 that specify the minimum percentage of premiums an insurer must spend on health care claims and quality-improvement activities. (That percentage is known as the medical loss ratio, or MLR.)[18] In those markets, some insurers could see their revenues and profits increase as the prices paid to providers rose. For instance, if enrollment remained constant, an insurer that kept its loss ratio equal to the required minimum could pay higher prices to providers, raise its premiums, and realize additional profits. The insurer could also achieve those additional profits while keeping its loss ratio at the required minimum by allowing spending to increase through more utilization of health care services by its enrollees. Studies suggest that insurers' responses to MLR requirements are largely consistent with increases

15. See Nicholas Tilipman, "Employer Incentives and Distortions in Health Insurance Design: Implications for Welfare and Costs," *American Economic Review*, vol. 112, no. 3 (March 2022), pp. 998–1037, http://doi.org/10.1257/aer.20181917.

16. See Anna D. Sinaiko, Shehnaz Alidina, and Ateev Mehrotra, "Why Aren't More Employers Implementing Reference-Based Pricing Benefit Design?" *American Journal of Managed Care*, vol. 25, no. 2 (February 2019), pp. 85–88, https://ajmc.com/link/3686.

17. Self-insured employers bear the financial risk of paying the health care costs of employees and their families rather than paying an insurer to assume that risk. Plans in which that financial risk is borne by an insurer are known as fully insured plans.

18. See Xiaoxi Zhao, "Medical Loss Ratio Regulation and Insurer Pricing" (draft, Boston University, March 19, 2021), https://tinyurl.com/ypjbms77 (PDF).

in utilization rather than in prices.[19] (For a discussion about eliminating MLR requirements, see Appendix A.)

Insurers' ability to negotiate lower prices with providers is also limited in markets that have more competing insurers. In those more competitive insurance markets, insurers' bargaining power is lessened relative to that of providers, and insurers may be reluctant to demand steep discounts because doing so could lead providers to drop out of their network.

Many other areas have less competitive insurance markets; there, dominant insurers could use their market power to negotiate lower prices for providers.[20] In those markets, however, a dominant insurer whose medical loss ratio was above the required threshold would have little incentive to pass on the savings from lower prices by reducing premiums, because it would face little pressure from competing insurers to do so.[21]

19. See, for instance, Steve Cicala, Ethan M. J. Lieber, and Victoria Marone, "Regulating Markups in U.S. Health Insurance," *American Economic Journal: Applied Economics*, vol. 11, no. 4 (October 2019), pp. 71–104, www.jstor.org/stable/26794322; and Jean M. Abraham, Pinar Karaca-Mandic, and Kosali Simon, "How Has the Affordable Care Act's Medical Loss Ratio Regulation Affected Insurer Behavior?" *Medical Care*, vol. 52, no. 4 (April 2014), pp. 370–377, https://doi.org/10.1097/MLR.0000000000000091.

20. See Eric Barrette, Gautam Gowrisankaran, and Robert Town, "Countervailing Market Power and Hospital Competition," *Review of Economics and Statistics* (forthcoming), https://tinyurl.com/3c6deucj; Kate Ho and Robin S. Lee, "Insurer Competition in Health Care Markets," *Econometrica*, vol. 85, no. 2 (March 2017), pp. 379–417, https://doi.org/10.3982/ecta13570; and Eric T. Roberts, Michael E. Chernew, and J. Michael McWilliams, "Market Share Matters: Evidence of Insurer and Provider Bargaining Over Prices," *Health Affairs*, vol. 36, no. 1 (January 2017), pp. 141–148, https://doi.org/10.1377/hlthaff.2016.0479.

21. See Leemore Dafny, Mark Duggan, and Subramaniam Ramanarayanan, "Paying a Premium on Your Premium? Consolidation in the US Health Insurance Industry," *American Economic Review*, vol. 102, no. 2 (April 2012), pp. 1161–1185, https://doi.org/10.1257/aer.102.2.1161.

Chapter 2: Policy Approaches to Reduce the Prices That Commercial Health Insurers Pay Providers

The Congressional Budget Office identified three broad policy approaches that the Congress could consider using to lower the prices that commercial health insurers pay for hospitals' and physicians' services. Those approaches focus on promoting competition among providers, promoting transparency about the prices paid to providers, and capping the level or growth of those prices.

CBO selected the approaches by first identifying all of the policy options that met the following criteria:

- Their primary purpose would be to address the prices paid to providers;
- They would fall within the historical purview of the Congress; and
- They have been included in recent state laws, draft federal legislation, policy proposals, or published articles on ways to reduce prices.

CBO then grouped the policies that met those criteria into three categories according to the primary mechanism they would use to target prices for hospitals' and physicians' services:

- Policies that promote competition among providers would aim to reduce prices by targeting providers' market power.
- Policies that promote price transparency would aim to reduce prices by targeting the price sensitivity of consumers and employers (which affects insurers in their negotiations with providers).
- Policies that cap the level of prices, the annual growth rate of prices, or both would aim to reduce prices by regulating them.

The first two approaches would reduce prices by targeting the causes of high prices. The third approach would reduce prices through regulation. Some other federal policies that have the potential to reduce prices but that did not meet those inclusion criteria are discussed in Appendix A. Policies that are not within the historical purview of the Congress but that could be implemented by other entities, such as states or employers, are described in Appendix B.

All three broad policy approaches that CBO identified would reduce commercial insurers' prices for hospitals' and physicians' services within the 10-year period typically used for Congressional budgeting if they were adopted in full, in CBO's assessment. (That assessment reflects the policies' anticipated effects in a given year of the first decade after the policies' enactment, once they had been implemented completely and stakeholders had fully adjusted to the changes.)

A regulatory approach—capping the level and growth of prices in all markets—would have the largest effect on prices, reducing them by a percentage ranging from moderate (defined here as from more than 3 percent to 5 percent) to large (more than 5 percent) depending on the design of the cap. Efforts to target the causes of high prices would have smaller effects. Promoting competition among providers would reduce prices by a small amount (from more than 1 percent to 3 percent). Promoting price transparency would reduce prices by a very small amount (0.1 percent to 1 percent), in CBO's view.

CBO made those assessments by reviewing related research and consulting with outside experts. The assessments are uncertain because only limited empirical evidence was available for many of the policies included in this report and because the price effects would vary depending on the legislative details of any specific policy (see Box 2-1).

Box 2-1.

Sources of Uncertainty About CBO's Assessments of How Policy Approaches Would Affect Prices

The Congressional Budget Office's assessments of the effects of policy approaches on prices paid to providers are subject to considerable uncertainty. The two main types of uncertainty associated with those assessments are estimating uncertainty, which concerns how much prices would respond to a specific piece of legislation, and policy uncertainty, which concerns how lawmakers would choose to write the legislation that established a policy.

Estimating uncertainty occurs for several reasons. In many cases, only scant research evidence is available about the effects of a specific policy, so effects must be projected on the basis of studies of related policies that do not closely resemble the policy under consideration. In other cases, a policy would affect prices through several interconnected channels, and each channel introduces uncertainty. For instance, many policies that promote competition among providers mainly target market concentration rather than directly targeting prices. To estimate the effect of such policies on prices, CBO must first assess how the policies would affect market concentration and then project how the change in market concentration would affect prices. Both of those effects are uncertain.

Policy uncertainty occurs in part because it is difficult for CBO to anticipate how lawmakers would design policies. Seemingly small details in how a law is written can have significant effects on its impact. For instance, to significantly increase price transparency, an all-payer claims database would not only have to include detailed information about negotiated prices but would also have to make it possible to attribute those prices to particular providers and insurers, as well as specify their geographic location, the particular services and procedures provided, the types of professionals providing those services, and the types of facilities in which the care was delivered. If the database lacked such specific information, it would be of less use to consumers, regulators, data aggregators, and the consultants who help employers and individuals shop for health plans and health care services.

Policy uncertainty can also make it challenging to assess the effects of a policy when there are many possible choices for its main parameters, as is the case for price caps. Although caps would have a fairly mechanical and direct effect on the prices paid to providers, the details would matter and could vary greatly. Those details include specifications about the level at which a cap would be set in legislation, how the cap would be enforced, and the providers and services to which the cap would apply, all of which would have significant effects on the resulting savings.

Policies That Promote Competition Among Providers

Lawmakers could reduce prices for hospitals' and physicians' services by targeting the market power of those providers, which affects their bargaining power in price negotiations with commercial insurers. Most of the policies under this approach would target the structure of the market for health care services, which conveys market power to providers, especially to those that have a dominant share of a market. Providers can attain market power in other ways as well, including by delivering specialized or unshoppable services (such as emergency services). But in general, legislation cannot fully address those other sources of market power. In CBO's assessment, adopting all of the policies included in this category would reduce commercial insurers' prices for hospitals' and physicians' services by a small amount in the first 10 years after the policies' enactment.

Types of Policies

Policies available to the Congress to promote competition among providers fall into four subcategories: increasing antitrust enforcement, reducing providers' incentives to consolidate or merge, increasing providers' ability to change jobs, and prohibiting anticompetitive clauses in contracts.

Policies That Increase Antitrust Enforcement. Antitrust laws promote a competitive marketplace by deterring or banning anticompetitive business practices and mergers or acquisitions that would substantially lessen competition. Strengthening the capacity of agencies to enforce those laws, or amending the laws themselves, could make markets more competitive or help counteract dominant providers' ability to extend their market power.

At the federal level, two agencies are largely responsible for enforcing antitrust laws: the Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DOJ). Each agency tends to specialize in certain industries. For the health care industry, the FTC has historically regulated the markets for hospitals' and physicians' services, whereas DOJ has overseen enforcement related to insurance. In their current capacities, those agencies review proposed mergers, file lawsuits to block mergers that are considered likely to harm competition, and pursue cases against providers or insurers engaging in anticompetitive business practices. They also conduct studies on competition in various markets, and they provide public comments about how proposed regulations at the federal or state level could affect competition.

Many proposed policies aimed at increasing antitrust enforcement would expand those agencies' responsibilities or change some policies that hinder their actions under existing antitrust law. For example, under current law, only large mergers must be reported to the government for advance review. Lawmakers could lower the statutory reporting threshold for premerger filings so that more businesses would be subject to that review process. That change would make it easier to track smaller transactions that might otherwise avoid antitrust scrutiny—a concern that is particularly relevant to mergers and acquisitions of physicians' practices. Although a single merger between practices might have little effect on that physician group's market power, multiple mergers could allow the group to become dominant as it grew larger.

Antitrust enforcement could also be bolstered by allowing the FTC to take action against the anticompetitive behaviors of not-for-profit firms, which it currently cannot do. The majority of hospitals are not-for-profit organizations, and evidence suggests that their prices for inpatient services tend to be as high as those of for-profit hospitals.[1] Allowing the FTC to investigate their behavior could enhance the agency's ability to target conduct that stifles competition.

Lawmakers could also amend the antitrust laws that the FTC and DOJ's Antitrust Division enforce. One possible target of such a change would be the standard for reviewing mergers under the Clayton Antitrust Act. Under current law, acquisitions that may "substantially lessen" competition or "tend to create a monopoly" are prohibited. Some policymakers have proposed modifying that legal standard to expand the conditions under which mergers would be prohibited, which would tend to strengthen those agencies' position in court.[2] Such a change could also act as a deterrent to market consolidation, even if the agencies did not take on substantially more cases.

Many proposed policies that would strengthen antitrust enforcement by expanding the scope of the FTC's and DOJ's work have been coupled with recommendations to increase funding for those agencies. Between 2010 and 2018, appropriations for the federal antitrust agencies declined in real terms (after removing the effects of inflation), while merger filings increased substantially.[3] Increased funding would allow the agencies to expand their enforcement activities—for example, by supporting investigations into more complex cases or studies of the effects of past mergers, which tend to be time-consuming and expensive. (Although the assessments in this report reflect the effects that such funding increases would have on prices, Congressional scorekeeping guidelines would not allow CBO to include any reductions in mandatory spending or increases in revenues in its cost estimates for legislation that would increase funding for those agencies without expanding their authority.[4] Instead, CBO would include only the outlays from such funding increases in its estimate of the budgetary effects of such legislation.)

Improving the data available to the FTC and DOJ could also help strengthen antitrust enforcement by enhancing their monitoring and research. One way to improve data would be to establish a federal all-payer claims database (APCD), which would contain standardized information about health care use, prices, and spending from all commercial insurers. (Such databases are discussed in more detail later in this chapter, in the section about

1. See Zack Cooper and others, "The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured," *Quarterly Journal of Economics*, vol. 134, no. 1 (February 2019), pp. 51–107, https://doi.org/10.1093/qje/qjy020.

2. See, for example, the Competition and Antitrust Law Enforcement Act of 2021, S. 225, 117th Cong. (2021), www.congress.gov/bill/117th-congress/senate-bill/225.

3. See Martin Gaynor, *What to Do About Health-Care Markets? Policies to Make Health-Care Markets Work*, Policy Proposal 2020-10 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/yh8d9n7r.

4. See guidelines 3 and 14 in Congressional Budget Office, *CBO Explains Budgetary Scorekeeping Guidelines* (January 2021), www.cbo.gov/publication/56507.

policies that promote price transparency.) Access to more comprehensive data would help those agencies anticipate anticompetitive mergers and analyze their possible effects, instead of having to request or subpoena data after the mergers had been proposed.

Policies That Reduce Providers' Incentives to Consolidate. The markets for hospitals' and physicians' services have become increasingly concentrated over time. A key driver of that trend is laws and regulations that may give providers an incentive to consolidate. Policies that countered those incentives would deter some hospitals and physicians from merging with or acquiring rival firms, which would slow the consolidation of markets.

One such incentive results from differences in payment rates for the same or similar services at different sites of care. For example, under Medicare's payment schedule, the total amount paid for a physician's service provided in some hospital outpatient departments (HOPDs) is higher than the amount paid for the same service delivered in a physician's office or an ambulatory surgical center. That higher rate applies because Medicare and many commercial insurers make a separate payment to hospitals, known as a facility fee, to account for the overhead and labor costs incurred when a provider delivers a service in a hospital or certain hospital-owned facilities. Several studies have found that the facility fees give hospitals an incentive to buy freestanding physicians' practices and convert them to HOPDs.[5] Even when patients could be treated appropriately in a less expensive setting, site-based payment differentials can encourage hospitals to direct services to more costly hospital-based facilities. That practice may occur more frequently when hospitals employ referring physicians, particularly if the physicians benefit directly or indirectly from such referrals.[6]

Despite recent progress in equalizing payments among sites of care, some differences remain. For example, the rates that Medicare pays for clinic visits at off-campus HOPDs (outpatient departments located away from hospitals' premises) were reduced and aligned with the rates that Medicare pays when those services are delivered in an office setting.[7] On-campus HOPDs, however, were excluded from that policy change. If Medicare's site-neutral payment policies were extended to cover a broader set of services and facilities than they do now, consolidation would become less financially appealing.

Another example of a payment policy that may encourage providers to consolidate is a prescription drug discount program known as 340b. It allows certain hospitals and other covered entities that serve low-income or underserved populations to purchase at a discount outpatient drugs dispensed to any of their patients. There are no restrictions on the prices that covered entities charge commercial insurers, and the prices that Medicare pays for outpatient drugs are the same regardless of whether they were purchased at the discounted 340b price.[8] As a result, hospitals can realize substantial savings when they administer discounted medications to insured patients, particularly patients with commercial insurance, which tends to have high reimbursement rates compared with 340b purchase prices. Some researchers have raised concerns that hospital systems may be acquiring physicians' practices in part to achieve those savings. One study showed, for example, that the 340b program was associated with a significant increase in hospitals' acquisitions of hematology-oncology practices and facilities.[9]

5. See Brady Post and others, "Hospital-Physician Integration and Medicare's Site-Based Outpatient Payments," *Health Services Research*, vol. 56, no. 1 (February 2021), pp. 7–15, https://doi.org/10.1111/1475-6773.13613; and David Dranove and Christopher Ody, "Employed for Higher Pay? How Medicare Payment Rules Affect Hospital Employment of Physicians," *American Economic Journal: Economic Policy*, vol. 11, no. 4 (November 2019), pp. 249–271, https://doi.org/10.1257/pol.20170020.

6. See, for instance, Michael R. Richards, Jonathan A. Seward, and Christopher M. Whaley, "Treatment Consolidation After Vertical Integration: Evidence From Outpatient Procedure Markets," *Journal of Health Economics*, vol. 81 (January 2022), article 102569, https://doi.org/10.1016/j.jhealeco.2021.102569; and Michael Chernew and others, "Physician Agency, Consumerism, and the Consumption of Lower-Limb MRI Scans," *Journal of Health Economics*, vol. 76 (March 2021), article 102427, https://doi.org/10.1016/j.jhealeco.2021.102427.

7. For more details about those changes, see Centers for Medicare & Medicaid Services, "Outpatient Clinic Visit Services at Excepted Off-Campus Provider-Based Departments: Payment Update," *mlnconnects* (Medicare Learning Network newsletter, September 9, 2021), https://tinyurl.com/ysdenbfb (PDF).

8. In many cases, Medicaid limits reimbursement to the amount that covered entities paid to acquire drugs in the 340b program. Those entities are required to ensure that manufacturers are not subject to duplicate discounts for drugs dispensed to Medicaid beneficiaries.

9. See Sunita Desai and J. Michael McWilliams, "Consequences of the 340B Drug Pricing Program," *New England Journal of Medicine*, vol. 378, no. 6 (February 2018), pp. 539–548, https://doi.org/10.1056/NEJMsa1706475.

A policy change that applied drug discounts under the 340b program on a patient-level basis—that is, to patients with certain characteristics rather than to all patients at certain sites of care—might reduce hospitals' and physicians' incentives to consolidate. But the extent to which such a policy would deter consolidation remains highly uncertain. Indeed, another study found little evidence that the 340b program had contributed to increases in vertical integration between hospitals and physicians (when physicians' practices are owned by hospitals).[10]

Lawmakers could also reduce providers' incentives to consolidate through policies that lessen their administrative burden. Administrative costs encourage providers to merge because becoming a part of a larger group creates economies of scale that reduce the average costs of undertaking administrative tasks for each individual provider. Streamlining public programs' payment and quality-reporting standards for providers might be one way to reduce providers' administrative costs. For example, in 2020, the Centers for Medicare & Medicaid Services used more than 2,000 quality metrics to track providers' performance, many of which were different from the metrics used by commercial insurers. Streamlining those metrics would decrease the administrative burden on providers.[11]

Making it easier to transfer information about patients between providers would also reduce providers' administrative burden. Integrated health care systems commonly use shared electronic medical records that allow for the seamless transfer of patients' clinical data.[12] Independent and small-group physicians, by contrast, regularly encounter challenges with accessing information about their patients because those patients are more likely to receive care in many other settings, some of whose data may be incompatible with the physicians' own IT systems. Policies that create common data standards and provide additional funding for health information exchanges could facilitate the flow of information among providers and ease the pressure on independent physicians to join larger physician groups or health systems. Additionally, some patients could be more likely to switch providers under those policies if it became less laborious for them to transfer their medical records or other personal information, thereby increasing the value of making prices more transparent.

Policies That Increase Providers' Mobility. Concentrated markets could become more competitive if the barriers for providers to practice in those markets were lowered or eliminated. Lawmakers could do that through policies that enhance providers' ability to change jobs.

The main way that legislation could increase providers' mobility would be to ban or reduce the enforceability of employment-based noncompete agreements that prevent physicians from leaving a practice to join one of its competitors. Because most health care services are purchased locally, those agreements stifle competition: If physicians constrained by such agreements want to change practices, they have to exit their market and leave their patients or require their patients to travel greater distances. One recent study of primary care physicians in five states found that noncompete agreements were included in about 45 percent of physicians' employment contracts.[13] Another study found that increasing the enforceability of those agreements led to higher prices for physicians' services.[14]

Policies That Prohibit Anticompetitive Contracts. Lawmakers could also promote competition among providers by limiting anticompetitive terms in contracts between providers and insurers. Providers with market power often favor anticompetitive contract terms that make it more challenging for rival providers to compete in their market. For instance, some dominant providers try to

10. See Abby Alpert, Helen Hsi, and Mireille Jacobson, "Evaluating the Role of Payment Policy in Driving Vertical Integration in the Oncology Market," *Health Affairs*, vol. 36, no. 4 (April 2017), pp. 680–688, https://doi.org/10.1377/hlthaff.2016.0830.

11. See David M. Cutler, *Reducing Administrative Costs in U.S. Health Care*, Policy Proposal 2020-09 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/ap9mcczh.

12. See Caroline S. Carlin, Roger Feldman, and Bryan Dowd, "The Impact of Hospital Acquisition of Physician Practices on Referral Patterns," *Health Economics*, vol. 25, no. 4 (April 2016), pp. 439–454, https://doi.org/10.1002/hec.3160.

13. See Kurt Lavetti, Carol Simon, and William D. White, "The Impacts of Restricting Mobility of Skilled Service Workers: Evidence From Physicians," *Journal of Human Resources*, vol. 55, no. 3 (February 2019), pp. 1025–1067, https://doi.org/10.3368/jhr.55.3.0617-8840R5.

14. See Naomi Hausman and Kurt Lavetti, "Physician Practice Organization and Negotiated Prices: Evidence From State Law Changes," *American Economic Journal: Applied Economics*, vol. 13, no. 2 (April 2021), pp. 258–296, https://doi.org/10.1257/app.20180078.

maintain their market share by negotiating contract provisions that prohibit insurers from offering plans with tiered networks or other incentives to steer patients toward lower-cost providers. In a tiered network, patients incur lower out-of-pocket costs if they seek care from providers in a more favorable tier, which are generally providers that have agreed to accept lower payment rates in return for insurers' encouraging patients to see them. Other tactics to steer patients toward lower-priced providers include directing enrollees to a preferred group of providers through information or other financial incentives.

A policy prohibiting contracts with providers that restrict insurers from offering tiered networks or from directing patients to lower-cost providers could reduce prices, on average, if the prohibition made insurers more likely to offer plans with those design features and if employers or individuals were more likely to buy such plans. Indeed, several studies have found that after insurers implemented a tiered network, providers in preferred tiers increased their market share relative to that of providers in the nonpreferred tier for certain groups of patients, suggesting that some consumers respond to those incentives.[15] However, plans that use such steering tactics have not been widely offered to date.[16] Prohibiting restrictive contract clauses might put further downward pressure on prices if providers responded by lowering their rates to attract a larger share of the enrollees in those plans.

Providers sometimes also require in their contracts that an insurer include affiliated providers in its network, a practice known as all-or-nothing contracting. Prohibiting that practice could reduce prices by limiting providers' ability to leverage the market power of affiliated providers to extract favorable contract terms. Such a prohibition would also enhance insurers' ability to design their networks of providers on the basis of price and quality.

15. See, for example, Anna D. Sinaiko, "Variations in Patient Response to Tiered Physician Networks," *American Journal of Managed Care*, vol. 22, no. 6 (June 2016), pp. 420–425, https://tinyurl.com/49aj6ymy; and Anna D. Sinaiko and Meredith B. Rosenthal, "The Impact of Tiered Physician Networks on Patient Choices," *Health Services Research*, vol. 49, no. 4 (August 2014), pp. 1348–1363, https://doi.org/10.1111/1475-6773.12165.

16. See Kaiser Family Foundation, *2019 Employer Health Benefits Survey* (September 25, 2019), https://tinyurl.com/3p3656p9.

How Policies That Promote Competition Would Affect Prices

Adopting all of the policies to promote competition described above would lower the prices that commercial insurers pay for hospitals' and physicians' services by a small amount (from more than 1 percent to 3 percent) relative to what they would be under current law, in CBO's assessment. That assessment reflects the estimated effects in the first 10 years after the policies were fully implemented and providers, insurers, patients, and employers had fully adjusted to them. The price reductions would be realized most quickly under policies that increase providers' mobility or restrict anticompetitive contracting. Policies that increase antitrust enforcement or reduce providers' incentives to consolidate would have less of an immediate effect on prices; however, those policies would contribute to price reductions over the longer term (see Box 2-2).

Mechanisms Underlying the Effects on Prices. In CBO's view, policies that promote competition would reduce the prices paid to providers in several ways. Some policies would decrease prices by increasing dominant providers' exposure to rivals—for example, by prohibiting anticompetitive contract terms that restrict insurers' ability to direct patients to lower-cost providers or by banning noncompete agreements for physicians. Competition from rivals would give the dominant providers in a market more incentive to lower their prices, improve the quality of their services, or make other changes to protect their market share.

The price effects of policies that increase dominant providers' exposure to rivals would materialize fairly quickly. Those effects would also be small, for several reasons. First, policies that ban anticompetitive clauses in contracts are difficult to enforce. Some providers would still negotiate restrictions on insurers' ability to direct patients to lower-priced providers without putting those terms in writing, so as to avoid scrutiny. Second, banning anticompetitive contract terms would have a limited effect on prices in areas with monopolistic providers, because insurers in those areas would not have other providers to direct their enrollees to. CBO has previously estimated negligible budgetary savings from prohibiting such anticompetitive clauses.[17]

17. See the estimate for section 302 of the Lower Health Care Costs Act in Congressional Budget Office, cost estimate for S. 1895, the Lower Health Care Costs Act (July 16, 2019), www.cbo.gov/publication/55457.

Box 2-2.

Longer-Term Effects of Policy Approaches to Reduce Prices

All three of the broad policy approaches included in this report would affect prices for hospitals' and physicians' services beyond the 10-year period usually used in Congressional budgeting. Those longer-term effects could be larger than the policies' effects in the first decade after enactment, but they are more uncertain.

Policies That Promote Competition Among Providers

The small price reductions (from more than 1 percent to 3 percent) that would occur over the first 10 years if all of the provider-competition policies were adopted would continue in the longer term. Additional price reductions might also occur after the first decade, for two reasons. First, two types of policies under this approach—increasing antitrust enforcement and reducing providers' incentives to consolidate—would probably take longer than 10 years to reach their full capacity for lowering prices. Second, the effects of policies that reduce the growth rate of prices—such as expanding site-neutral payment policies in Medicare and lowering the threshold for premerger filings—would compound over time. Reducing the rate of growth causes the difference between what prices would be under the policies and what they would be under current law to increase over time.

Policies That Promote Price Transparency

The very small price reductions (0.1 percent to 1 percent) that would occur over the first 10 years from adopting all of the price-transparency policies would continue in the longer term. Additional reductions might occur if many employers used newly available information about prices to change their plans' benefit designs or to become more active negotiators in their contracts with providers and insurers. Employers would be more likely to take those actions if benefit designs that encouraged employees to be more sensitive to prices were available and if the employers operated in areas where competition among providers was robust enough to provide options for care.

Additional price reductions could also occur in the longer term if the greater availability of price information changed consumer norms about price shopping for health care. If more consumers started using price information to choose lower-priced providers, then, over time, those changes in price sensitivity might pressure providers to accept negotiated prices that were much lower than they would be under current law.[1]

Although the longer-term price reductions could be larger than the reductions in the first 10 years, they would probably nevertheless be small, in CBO's assessment.

Policies That Cap the Level or Growth of Prices

The moderate price reductions (from more than 3 percent to 5 percent) to large price reductions (more than 5 percent) that would occur over the first 10 years if the most comprehensive set of price-cap policies was adopted would continue in the longer term. Capping the growth of prices could have larger effects in the longer term than in the first decade because reductions in the growth rate would lead to an additional effect each year, compounding over time.

1. See Zach Y. Brown, "An Empirical Model of Price Transparency and Markups in Health Care" (draft, University of Michigan, August 2019), https://tinyurl.com/2wkadav9 (PDF).

Other competition-related policies might reduce commercial insurers' prices for hospitals' and physicians' services by preventing markets from becoming more concentrated—for example, by increasing antitrust enforcement or reducing providers' incentives to consolidate. In most cases, such policies would constrain price growth by averting some future mergers. Although policies related to antitrust enforcement could bolster competition to some extent (for instance, by stopping providers' anticompetitive conduct), their primary effect would be to discourage future consolidation by making it more difficult to undertake unlawful actions that allow providers to extend their market power. (Antitrust agencies can file suits to undo completed mergers that confer market power to providers, but such suits are expensive, rare, and difficult to win.)[18]

Some policies aimed at preventing consolidation could reduce prices through other channels as well. For instance, policies that decrease providers' administrative

18. See Martin Gaynor, *What to Do About Health-Care Markets? Policies to Make Health-Care Markets Work*, Policy Proposal 2020-10 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/yh8d9n7r; and Erin C. Fuse Brown and Jaime S. King, "The Double-Edged Sword of Health Care Integration: Consolidation and Cost Control," *Indiana Law Journal*, vol. 92, no. 1 (Winter 2016), article 2, www.repository.law.indiana.edu/ilj/vol92/iss1/2.

costs could lead providers to agree to lower negotiated prices, but that would be most likely to occur in the very few markets that have a significant amount of competition. Providers that face few competitors or that have substantial market power for other reasons would face little pressure to lower their prices.

Policies that prevent markets from becoming more concentrated would reduce prices by only a small extent in the first 10 years, for two reasons. First, most markets are already highly concentrated. They would remain so even under the most stringent efforts to prevent consolidation, and the failure to stop just a single merger could result in a monopoly market. Second, the price-reducing effects of such policies would take time to materialize. Market consolidation generally occurs slowly, so the effects of curbing its growth would not be noticeable for some time (see Box 2-2 on page 19).

Competition-promoting policies that aim to reduce prices would have limited effects because other sources of market power and additional factors that contribute to high prices for providers would remain. Many providers derive market power through sources that are not amenable to change by government policy, such as through having a reputation for quality or providing services or other care that patients cannot easily shop for. A recent study suggested those characteristics as potential explanations for high prices when it found that 30 percent of high-priced hospitals were located in markets that would be considered unconcentrated under federal antitrust guidelines.[19] Still other sources of providers' market power could be targeted only by entities other than the Congress (see Appendix B).

Basis for CBO's Assessment. To form its assessment of the likely price effects from adopting all of the aforementioned policies to promote competition among providers, CBO reviewed the relevant research literature and analyzed how the policies would affect providers' anticompetitive conduct, mergers or acquisitions, and physicians' mobility.

To estimate the effects of restrictions on anticompetitive contracting on the prices paid to providers, CBO began with its 2019 estimate of the effects of section 302 of the Lower Health Care Costs Act. That proposed legislation included several of the policies described above that would deter anticompetitive behavior by health care providers, such as policies to ban contracts between providers and insurers that prevent insurers from offering plans that have tiered networks or other incentives to steer patients toward lower-cost providers.[20] In its cost estimate for the bill, CBO concluded that banning such anticompetitive contracts would affect only the subset of markets where there was a dominant but nonmonopolistic provider and no single dominant insurer. As a result, CBO estimated that banning such contracts would decrease average premiums for commercial health insurance by about 0.05 percent. CBO's current assessment of which markets those policies would affect remains unchanged. But CBO has increased its estimate of the effect on prices to reflect more recent evidence about the effects of tiered networks on spending for hospitals' services and about the additional savings that would be achieved if legislation required insurers to offer at least one tiered-network plan.[21]

CBO next considered how banning employment-based noncompete agreements would affect physicians' mobility, reduce concentration in the markets for physicians' services, and lower the prices commercial insurers pay for those services. In making its assessment, CBO relied on a study that estimated how changes in the enforceability of noncompete agreements affected the prices that commercial insurers paid for a set of commonly used services provided in nonhospital settings.[22] To project the effects of a federal ban on such agreements, CBO made several adjustments to the estimate from that study. For example, CBO accounted for the share of overall spending on physicians' services that would be affected in much the same way as spending on the services included in the study. CBO also accounted for changes in state laws that

19. See Maximilian J. Pany, Michael E. Chernew, and Leemore S. Dafny, "Regulating Hospital Prices Based on Market Concentration Is Likely to Leave High-Price Hospitals Unaffected," *Health Affairs*, vol. 40, no. 9 (September 2021), pp. 1386–1394, https://doi.org/10.1377/hlthaff.2021.00001.

20. See Congressional Budget Office, cost estimate for S.1895, the Lower Health Care Costs Act (July 16, 2019), www.cbo.gov/publication/55457.

21. See Elena Prager, "Healthcare Demand Under Simple Prices: Evidence From Tiered Hospital Networks," *American Economic Journal: Applied Economics*, vol. 12, no. 4 (October 2020), pp. 196–223, https://doi.org/10.1257/app.20180422.

22. See Naomi Hausman and Kurt Lavetti, "Physician Practice Organization and Negotiated Prices: Evidence From State Law Changes," *American Economic Journal: Applied Economics*, vol. 13, no. 2 (April 2021), pp. 258–296, https://doi.org/10.1257/app.20180078.

have occurred since the end of the period covered in that study. In addition, CBO adjusted the estimate from that study on the assumption that a federal ban on noncompete agreements would be much more comprehensive than virtually all of the state-level changes in enforcement included in that study.

The rest of CBO's assessment was based on the extent to which the remaining competition-promoting policies discussed above would deter mergers or acquisitions, thereby curbing the increases in both horizontal consolidation and vertical integration expected under current law. (Horizontal consolidation refers to mergers among the same type of providers, such as two or more hospitals; vertical integration in this context refers to mergers between hospitals and physicians' practices.) To estimate the effects on prices from deterred mergers or acquisitions, CBO first examined recent changes in the concentration of markets for hospitals' and physicians' services (as measured by the Herfindahl–Hirschman index, or HHI) and recent trends in the share of physicians working in practices owned by hospitals.[23] In CBO's assessment, if those trends continued over the next 10 years, no more than a quarter of the increase in market concentration and vertical integration could be averted by the remaining competition-promoting policies that CBO examined. That assessment includes the projected effects of expanding Medicare's site-neutral payment policies to a broader set of services and facilities, based on CBO's review of the research literature. But those effects could be larger if commercial insurers decided to adopt similar payment policies in their plans.[24]

CBO then assessed how prices for hospitals' and physicians' services would evolve if markets were less consolidated in the future than they would be under current law. CBO reviewed studies that describe the relationship between changes in vertical integration or market concentration (measured using the HHI) and changes in the prices paid to providers by commercial insurers. In that review, CBO relied on studies published since 2010 that used nationwide data or that included many markets, as opposed to studies that were published before 2010 or that focused on a specific merger or a small geographic area.[25] CBO also gave greater weight to studies that estimated the effects of vertical integration on prices if the studies' design accounted for concurrent changes in horizontal market consolidation.

23. See Christopher M. Whaley and others, "Physician Compensation in Physician-Owned and Hospital-Owned Practices," *Health Affairs*, vol. 40, no. 12 (December 2021), pp. 1865–1874, https://doi.org/10.1377/hlthaff.2021.01007; Physicians Advocacy Institute, *COVID-19's Impact on Acquisitions of Physician Practices and Physician Employment 2019–2020* (prepared by Avalere Health, June 2021), https://tinyurl.com/mrnbu7vx (PDF); and Brent D. Fulton, "Health Care Market Concentration Trends in the United States: Evidence and Policy Responses," *Health Affairs*, vol. 36, no. 9 (September 2017), pp. 1530–1538, https://doi.org/10.1377/hlthaff.2017.0556. The Herfindahl–Hirschman index is a common measure of market concentration; it indicates the extent to which a market is dominated by one or a few participants.

24. See Brady Post and others, "Hospital-Physician Integration and Medicare's Site-Based Outpatient Payments," *Health Services Research*, vol. 56, no. 1 (February 2021), pp. 7–15, https://doi.org/10.1111/1475-6773.13613; and David Dranove and Christopher Ody, "Employed for Higher Pay? How Medicare Payment Rules Affect Hospital Employment of Physicians," *American Economic Journal: Economic Policy*, vol. 11, no. 4 (November 2019), pp. 249–271, https://doi.org/10.1257/pol.20170020.

25. For effects on hospitals' negotiated prices, see Jodi L. Liu and others, *Impact of Policy Options for Reducing Hospital Prices Paid by Private Health Plans* (RAND Corporation, 2021), www.rand.org/pubs/research_reports/RRA805-1.html; Zack Cooper and others, "The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured," *Quarterly Journal of Economics*, vol. 134, no. 1 (February 2019), pp. 51–107, https://doi.org/10.1093/qje/qjy020; and Seidu Dauda, "Hospital and Health Insurance Markets Concentration and Inpatient Hospital Transaction Prices in the U.S. Health Care Market," *Health Services Research*, vol. 53, no. 2 (April 2018), pp. 1203–1226, https://doi.org/10.1111/1475-6773.12706. For effects on physicians' negotiated prices, see Eric Sun and Laurence C. Baker, "Concentration in Orthopedic Markets Was Associated With a 7 Percent Increase in Physician Fees for Total Knee Replacements," *Health Affairs*, vol. 34, no. 6 (June 2015), pp. 916–921, https://doi.org/10.1377/hlthaff.2014.1325; Abe Dunn and Adam Hale Shapiro, "Do Physicians Possess Market Power?" *Journal of Law and Economics*, vol. 57, no. 1 (February 2014), pp. 159–193, https://doi.org/10.1086/674407; and Laurence C. Baker and others, "Physician Practice Competition and Prices Paid by Private Insurers for Office Visits," *JAMA*, vol. 312, no. 16 (October 22, 2014), pp. 1653–1662, https://doi.org/10.1001/jama.2014.10921. For effects of vertical integration on prices, see Haizhen Lin, Ian M. McCarthy, and Michael Richards, "Hospital Pricing Following Integration With Physician Practices," *Journal of Health Economics*, vol. 77 (May 2021), article 102444, https://doi.org/10.1016/j.jhealeco.2021.102444; Cory Capps, David Dranove, and Christopher Ody, "The Effect of Hospital Acquisitions of Physician Practices on Prices and Spending," *Journal of Health Economics*, vol. 59 (May 2018), pp. 139–152, https://doi.org/10.1016/j.jhealeco.2018.04.001; and Hannah T. Neprash and others, "Association of Financial Integration Between Physicians and Hospitals With Commercial Health Care Prices," *JAMA Internal Medicine*, vol. 175, no. 12 (December 2015), pp. 1932–1939, https://doi.org/10.1001/jamainternmed.2015.4610.

After selecting studies (and giving less weight to studies that included fewer services), CBO used average estimates of how prices respond to changes in market concentration or vertical integration to produce a central estimate. If a study included multiple estimates, CBO averaged them before calculating an overall average across the studies. CBO estimated that a 1 percent decrease in the market concentration of physicians (as measured by the market's HHI) would reduce prices paid for physicians' services by 0.08 percent, and a 1 percent decrease in the market concentration of hospitals would reduce prices paid for hospitals' services by 0.13 percent. CBO calculated separate estimates for physician and hospital markets to account for differences in the size of effects described in the literature, as well as differences in the baseline competitiveness of those markets. The additional effects of vertical integration on prices, conditional on changes in horizontal market consolidation, were also accounted for separately.

CBO multiplied the projected changes in market concentration and vertical integration by its estimate of the responsiveness of prices to those changes to arrive at its assessment of how much prices would be reduced under the remaining policies to promote competition among providers. Those effects were added to the estimated price reductions that would occur under legislation that would restrict anticompetitive contracts and ban employment-based noncompete clauses.

The extent to which the aforementioned competition-promting policies would forestall future increases in consolidation, particularly in the first 10 years, is very uncertain. CBO expects that for any given policy or set of policies, such effects would vary substantially depending on the details of the legislation (see Box 2-1 on page 14).

Policies That Promote Price Transparency

CBO also examined policies that would reduce prices for hospitals' and physicians' services by targeting consumers' and employers' sensitivity to those prices. In CBO's assessment, if lawmakers adopted all of the price-transparency policies described below, prices would fall by a very small amount in the first 10 years, relative to their trajectory under current law, once the policies had been fully implemented and stakeholders had adjusted their behavior in response to the changes.

Types of Policies

CBO identified two types of policies available to the Congress for promoting price transparency: expanding or refining existing federal regulations about prices and establishing a federal all-payer claims database that would make price information available in a standardized manner.

Policies That Expand or Refine Existing Federal Regulations. Recently adopted federal regulations require hospitals and insurers to make their prices available to the public. The Hospital Price Transparency rule, which went into effect in January 2021, requires hospitals to disclose their negotiated in-network prices, their discounted cash prices, and their gross charges for all items and services in a machine-readable file (one that is easily analyzed by computers). The Transparency in Coverage rule, which went into effect in July 2022, mandates that insurers disclose their negotiated in-network prices and their out-of-network payments for all items and services in a machine-readable file. The two rules also require hospitals and insurers to provide more-targeted price information in a consumer-friendly manner, including through an online tool, to facilitate price shopping. A similar provision in the 2020 No Surprises Act requires providers to give patients a good-faith estimate of their out-of-pocket costs before the patients receive care.

Two main concerns have been raised about the Hospital Price Transparency rule since it took effect: a lack of compliance and a lack of standardized reporting. One estimate indicates that only about 45 percent of hospitals were fully or mostly compliant with the rule in late 2021, near the end of its first year in force.[26] In 2022, the Administration increased the penalties for noncompliance from a flat fee of $300 per day to a fee that varies with a hospital's size, up to a maximum of $5,500 per day for the largest hospitals. That increase is likely to boost compliance to some extent, but even the maximum penalty represents a small portion of most hospitals' revenues.

Penalties for insurers that fail to comply with the Transparency in Coverage rule could amount to $100 per day for each enrollee affected by the noncompliance. That penalty would be a substantial share of

26. See Ryan Kost, "CY 2022 Transparency Final Rule: Increased Penalties for Non-Compliant Hospitals," *Turquoise Health* (blog entry, November 5, 2021), https://tinyurl.com/326fbc8a.

an insurer's revenues for violations in which all of the insurer's enrollees were considered to be affected.

A lack of standardized reporting also limits the usability of the price data that complying hospitals have released. Because the Hospital Price Transparency rule does not require a standard format, hospitals currently post files in a variety of formats.[27] That variety makes combining the data and comparing prices among hospitals time-consuming for third parties, such as benefit consultants that help employers choose which health plans to offer and companies that help consumers shop for health care. The variety of formats also makes it challenging for consumers and employers to use the data themselves.

The Hospital Price Transparency rule also allows hospitals to report prices using different definitions of services or service packages, based on the definitions used in their contracts with different insurance plans.[28] For example, some contracts use per diem rates, whereas others use diagnosis-related groups or other billing codes. Moreover, hospitals are not required to list each individual item or service that is included in a service package. Those provisions make it easier for hospitals to comply with the rule but make it harder for patients and others to compare prices for service packages that are defined in different ways by different hospitals and insurers. The rule's provisions also make it difficult to observe payments that are not solely associated with a particular service, such as the quality bonus payments that insurers sometimes pay providers if they meet certain thresholds for quality of care.

Lawmakers could increase the effect of federal regulations on price transparency by increasing compliance penalties for hospitals and by requiring more-standardized reporting of price information. Larger compliance penalties would induce more hospitals to post their prices. To standardize that price information, legislation could require all hospitals to post data using the same file format and could specify exactly how files should be organized.[29] Standardizing the services and service packages used in reporting prices would be harder because hospitals would have to alter the price schedules they negotiate with insurers to meet the reporting requirements. Adjusting those price schedules would add to hospitals' administrative costs, and in some cases hospitals might not be able to change their price schedules to conform to standardized definitions.

Despite the limitations of existing federal regulations, CBO expects them to increase price transparency over the next 10 years under current law. CBO anticipates that over that period, insurers' compliance with the Transparency in Coverage rule will be greater than hospitals' compliance with the Hospital Price Transparency rule because of the larger penalties. CBO also anticipates that third parties will use the machine-readable files provided by insurers to make prices more transparent to individuals and employers.

Lawmakers have introduced legislation to codify the two regulations in federal law.[30] CBO estimates no budgetary effects from codifying existing federal regulations.

Policies That Establish a Federal All-Payer Claims Database With Standardized Reporting. Another way to increase price transparency is to establish both a federal repository that collects data on claims from all commercial health insurers (an APCD) and a public reporting tool that summarizes data from the APCD and other sources in a standardized manner. Claims are the records generated when a provider bills a health insurance plan for services used by the plan's members. Each claim includes the service being billed for and the amount that the insurer paid the provider for the service, as well as other information relevant for billing. APCDs generally aim to capture the records of health care spending for all privately insured people in a designated area, such as a state. Those records can be analyzed to measure the prices that commercial insurers pay to particular providers for specific services. Eighteen states currently

27. See Lizzie Carroll, "2021 Price Transparency Data Year In Review," *Turquoise Health* (blog entry, December 16, 2021), https://tinyurl.com/2p95f49b.

28. See Terri L. Postma, "Compliance With Hospital Price Transparency Final Rule: 8 Steps to a Machine-Readable File" (presentation, Centers for Medicare & Medicaid Services, August 2021), https://tinyurl.com/47mrduhc (PDF).

29. A major third-party user of those data has released specific recommendations, but file standards could be defined in other ways as well. See Turquoise Health, "Provider Price Transparency—Suggested Machine-Readable Data File Format" (GitHub repository, accessed August 2, 2022), https://tinyurl.com/bdhku77r.

30. See the Health Care PRICE Transparency Act, H.R. 3029, 117th Cong. (2021), www.congress.gov/bill/117th-congress/house-bill/3029.

have some form of APCD that requires submissions from payers.[31]

Existing state APCDs have several features that limit their effects on price transparency. They do not capture the full set of claims in the market, because states do not have the authority to require employers with self-insured plans to submit claims, although such plans account for more than 60 percent of enrollment in commercial health insurance.[32] In addition, the price information captured by state APCDs is rarely reported in a way that allows people to compare the prices their own insurance company pays different providers. Only a few states use their APCDs to publicly report price information for individual providers and health plans. Finally, state APCD data are not always made available for analysis by third parties, such as researchers.

Using a Federal APCD for Price Transparency. A federal APCD and public reporting tool that addressed those limitations would increase price transparency in two ways. First, a standardized and publicly accessible reporting tool that was available nationwide would increase the prominence of the price information already disclosed under current federal regulations and by some state APCDs. Some third parties have used the machine-readable files posted by hospitals under the Hospital Price Transparency rule to report prices for individual hospitals and insurers. But a public website that used information from a federal APCD to report insurer-specific prices for individual providers would be more visible, authoritative, and comprehensive, as well as being freely available.

Second, the federal database and reporting tool would allow for more comprehensive price comparisons by third parties than the information in the machine-readable files disclosed under current federal regulations. A public website with a reporting tool based on data from an APCD could incorporate more detailed information about the distribution of prices. It could also use claims data to report combined prices for services that are commonly provided together and could do so in ways that were standardized across hospitals and insurers. Although analyzing the data from an APCD to compute prices that were entirely standardized across insurers and providers would still pose challenges, the reporting tool could initially adopt methods used by existing state websites and other analyses of prices that are based on commercial claims data. The public reporting tool could also supplement and strengthen the price information in the federal APCD by incorporating data from the machine-readable files that are required under current federal regulations.[33]

Information on prices would be of greater use to consumers and employers if it was accompanied by information on the quality of health care services. Without information about providers' quality, people may be reluctant to choose lower-priced providers because of concerns that lower prices signal lower quality. Indeed, some observers have criticized existing price-transparency regulations on the grounds that reported prices would be difficult for people to interpret and act on without measures of quality.[34] The more comprehensive the quality measures presented alongside prices for particular hospitals and physicians in the reporting tool, the more useful the website would be for price shopping.

Data from the federal APCD could be used to construct claims-based measures of the quality of services. Some of those measures have been shown to reflect providers' ability to achieve better health outcomes for patients.[35] Claims-based quality measures are not available for many services, however, so incorporating data about quality

31. See APCD Council, "Interactive State Report Map" (accessed August 2, 2022), www.apcdcouncil.org/state/map.

32. See Katherine Grace Carman and others, *The History, Promise, and Challenges of State All Payer Claims Databases* (RAND Corporation, June 2021), https://tinyurl.com/3kam42zy (PDF).

33. CBO previously estimated that establishing a federal APCD under the Lower Health Care Costs Act would cost the federal government $201 million between 2019 and 2024—a cost entirely resulting from the expense of setting up such a database. See Congressional Budget Office, cost estimate for S. 1895, the Lower Health Care Costs Act (July 16, 2019), www.cbo.gov/publication/55457. CBO did not estimate additional budgetary effects from establishing the APCD because the bill did not clearly stipulate that the database had to contain negotiated prices (as opposed to estimates based on providers' charges) and because the bill did not establish public reporting of the information contained in the APCD. In CBO's assessment, such public reporting gives APCDs their greatest potential to exert downward pressure on prices.

34. See Jeff Dobro and Dorian Z. Smith, "Transparency in Coverage Proposed Regulations" (comment letter, Mercer Global, January 29, 2020), https://tinyurl.com/2p8d96cn (PDF).

35. See Joseph Doyle, John Graves, and Jonathan Gruber, "Evaluating Measures of Hospital Quality: Evidence From Ambulance Referral Patterns," *Review of Economics and Statistics*, vol. 101, no. 5 (December 2019), pp. 841–852, https://doi.org/10.1162/rest_a_00804.

from other sources (such as electronic health records or surveys of patients' experiences) would help the reporting tool provide more comprehensive information about service quality. The reporting tool could combine individual measures into a total quality score for each provider and could present each quality measure separately by type of service.

One recent policy proposal recommends integrating information about negotiated prices and quality from a federal APCD into the federal Care Compare website.[36] That website currently uses Medicare claims, patient experience surveys, mortality records, and other data to report quality measures for hospitals and doctors and allows people to compare nearby providers using those measures. However, the website is more useful for Medicare patients than it is for people under age 65 who have commercial insurance. Care Compare does not include the prices negotiated by commercial health plans, and the quality measures are more relevant for Medicare patients than for patients with commercial insurance. (For example, quality metrics for obstetric care are not reported.) A federal APCD would allow the Care Compare website to incorporate information about prices paid by commercial insurers and include quality measures that are relevant for the commercially insured population.

Other Uses of a Federal APCD. Besides contributing to price transparency, a federal APCD could serve as a resource for government agencies, academic researchers, industry groups, and other third parties to analyze the factors that drive health care spending, use of care, and prices.[37] Several databases of commercial claims are currently maintained by private companies. But those databases are expensive to buy, do not include the entire commercially insured population, and sometimes limit users' ability to access important information, such as the identity of specific hospitals.

Both federal and state agencies could use the information in a federal APCD. For example, the FTC and DOJ could use the data to monitor and enforce antitrust policy, which would promote competition among providers. Other federal agencies, including CBO and the Office of the Actuary at the Centers for Medicare & Medicaid Services, could use the data to better project future health care spending and estimate the effect of proposed policies on spending. A federal APCD could also help state governments analyze health care spending. States are trying various approaches to reduce or slow the growth of health care spending; a federal APCD would provide information for different states to pursue different strategies.[38] The database could also be used to implement other federal and state policies. For example, regulations on out-of-network prices under the No Surprises Act and some related state policies refer to negotiated in-network prices. Those prices could be calculated from a federal APCD and posted publicly.

How Policies That Promote Transparency Would Affect Prices

Adopting both types of transparency policies discussed above—expanding or refining current federal rules that require providers to disclose their prices and creating a federal database of claims information from all payers—would reduce the prices that commercial insurers pay for hospitals' and physicians' services by a very small amount (0.1 percent to 1 percent) relative to what those prices would be under current law, in CBO's assessment.

Mechanisms Underlying the Effects on Prices. In theory, greater transparency has the potential to reduce prices by making consumers and employers more sensitive to price in their demand for health care. Transparency could cause further reductions in prices if providers responded to the increased price sensitivity by accepting lower prices in their negotiations with insurers. In addition, a federal APCD could be used by government officials and researchers for antitrust enforcement and other purposes that would lead to lower prices.

In CBO's assessment, however, adopting policies that promote price transparency would have very small effects on prices, for several reasons. First, consumers' and employers' responses to the new information would probably be modest. The policies would improve their access to price information, but only a small share of them would be likely to act on that information, so any resulting decrease in average prices would be very small.

36. See Preethi Rao and others, *Barriers to Price and Quality Transparency in Health Care Markets* (RAND Corporation, 2021), https://doi.org/10.7249/RR-A1158-1.

37. Some of those other goals are described in Matthew Fiedler and Christen Linke Young, *Federal Policy Options to Realize the Potential of APCDs* (USC-Brookings Schaeffer Initiative for Health Policy, October 2020), https://tinyurl.com/3t7amy98.

38. See Ann Hwang and others, *State Strategies for Slowing Health Care Cost Growth in the Commercial Market* (Commonwealth Fund, February 2022), https://tinyurl.com/ywfjd5e5.

Second, although the policies would address some causes of consumers' and employers' insensitivity to prices, other important causes—such as the complexity of the medical system, reliance on recommendations from physicians, and tax subsidies for generous insurance coverage—would remain. Third, the limited increases in consumers' and employers' price sensitivity would result in only incremental changes to the bargaining dynamic between providers and insurers. Providers would still have substantial market power in their negotiations with insurers because of their market share or "must-have" status, which would continue to contribute to high prices. Fourth, existing federal regulations already impose many transparency requirements, leaving limited scope for new policies to have a large additional effect on transparency.

Responses by Consumers. Some consumers—particularly those with a financial incentive, such as a deductible—would use the newly available price information from the public reporting tool, or from tools offered by their employer or health plan that incorporated the new information, to seek lower-cost services. However, the share of consumers doing that would be small. Many services are not amenable to price shopping, whether because consumers do not have time to consider the price before receiving care or because only one provider offers the service in their area. In addition, most people with commercial insurance can already access a price-shopping tool through their plan's website.

Moreover, studies have shown that only a small percentage of enrollees in plans with price-comparison tools use such tools, even for services that are amenable to price shopping. That low degree of use may result from lack of awareness about the tools, difficulty using them or interpreting the information they provide, or weak financial incentives to use them. Unlike the price-shopping tools available through insurers, the new public reporting tool would not be able to automatically provide out-of-pocket cost estimates that reflected the cost-sharing requirements of each patient's plan, requiring patients to take an extra step to interpret the prices reported through the public tool. Finally, many consumers rely on factors other than price when selecting a provider, such as the advice of medical professionals, personal recommendations, or geographic proximity.[39] More consumers might use price information in the longer term if large-scale public reporting of such information changed consumer norms about shopping for health care (see Box 2-2 on page 19).

Responses by Insurers and Providers. Research has shown that when a meaningful percentage of consumers use transparency tools to price shop for services, some providers lower their prices to keep the affected services competitive. One study found that providers reduced their prices for laboratory services by an average of 1 percent when the share of consumers in their market with access to a price-transparency tool increased by 5.6 percentage points.[40] That result is difficult to extrapolate to a public reporting tool that 100 percent of consumers in every market would theoretically have access to, but it suggests that providers might lower their prices by more than 1 percent for the subset of services that are most amenable to price shopping. Another study found that providers decreased their prices for imaging services by an average of 2 percent after the state of New Hampshire introduced a public website reporting prices based on the state's APCD.[41]

Responses by Employers. A small number of employers might respond to the new information by demanding plans with benefit designs that steer patients toward lower-priced providers or by pressing the health insurers or other companies that negotiate prices on their behalf to bargain for lower prices. Studies have shown that benefit designs that give consumers tools and strong, readily understandable financial incentives to price shop can substantially increase the share of services obtained from lower-priced providers.[42] (For more information about policy options available to employers, see Appendix B.)

39. See Michael Chernew and others, *Are Health Care Services Shoppable? Evidence From the Consumption of Lower-Limb MRI Scans*, Working Paper 24869 (National Bureau of Economic Research, January 2019), www.nber.org/papers/w24869; and Eline M. van den Broek-Altenburg and Adam J. Atherly, "Patient Preferences for Provider Choice: A Discrete Choice Experiment," *American Journal of Managed Care*, vol. 26, no. 7 (July 2020), pp. 219–224, https://tinyurl.com/3j7thd6x.

40. See Christopher M. Whaley, "Provider Responses to Online Price Transparency," *Journal of Health Economics*, vol. 66 (July 2019), pp. 241–259, https://doi.org/10.1016/j.jhealeco.2019.06.001.

41. See Zach Y. Brown, "Equilibrium Effects of Health Care Price Information," *Review of Economics and Statistics*, vol. 101, no. 4 (October 2019), pp. 699–712, http://doi.org/10.1162/rest_a_00765.

42. See, for example, Christopher Whaley, Timothy Brown, and James Robinson, "Consumer Responses to Price Transparency Alone Versus Price Transparency Combined With Reference Pricing," *American Journal of Health Economics*, vol. 5, no. 2 (Spring 2019), pp. 227–249, https://doi.org/10.1162/ajhe_a_00118.

However, many employers would be reluctant to change the benefit designs of the plans they offered because of the complexity of the medical system and fear of alienating some employees.[43] Providers would have some incentive to accept lower negotiated prices from plans that effectively steered patients toward lower-priced providers, but that incentive would be limited if only a small number of employers adopted such plans. The ability of most employers to press for lower negotiated prices on their own would also be limited by their lack of market leverage, because their employees represent only a small share of a geographic market.[44] And, like consumers, employers would have limited scope for using price information to select lower-priced providers when a service was offered by only one provider in their area.

Lessons From a State Model for a Federal APCD. In New Hampshire—whose experience offers the closest model of how a federal all-payer claims database could be used to increase price transparency—prices for shoppable services decreased by a modest amount after the state introduced a website that reported price information using data from the state's APCD. The most comprehensive study of New Hampshire's experience found that 8 percent of people shopping for advanced imaging services used the website to compare prices; that use was concentrated among people whose spending was subject to a deductible.[45] After five years, prices for imaging services that were included on the website fell by 4 percent relative to prices for other imaging services that were not included on the website. About half of that decrease resulted from demand-side responses as consumers and employers chose to purchase more care from providers with lower prices. The other half of the decrease resulted from supply-side responses as individual providers accepted lower prices from insurers. One report indicated that providers in the state accepted lower prices in part because of pressure from employers and changes in the benefit designs that employers offered.[46]

New Hampshire's transparency website probably had a greater effect on prices for imaging services than a national transparency website could have on the average prices paid by commercial insurers for all services, because imaging services are one of the easiest types of care to shop for. Although some researchers have estimated that up to 47 percent of spending on hospitals' and physicians' services is for services that could, in principle, be shopped for, CBO expects that a much smaller share of spending would be affected to the same extent as spending for imaging services.[47] The available evidence indicates that among services that are often categorized as shoppable, price-transparency tools have the biggest effect on the prices of services that are more homogeneous (and that consumers therefore see as interchangeable) and services whose prices vary more widely.[48] Imaging services and laboratory tests are two common and well-studied examples of such services. By contrast, prices for office visits—a service that is less homogeneous and subject to less price variation—have been shown to be less affected by price shopping.[49]

43. See Nicholas Tilipman, "Employer Incentives and Distortions in Health Insurance Design: Implications for Welfare and Costs," *American Economic Review*, vol. 112, no. 3 (March 2022), pp. 998–1037, https://doi.org/10.1257/aer.20181917; and Anna D. Sinaiko, Shehnaz Alidina, and Ateev Mehrotra, "Why Aren't More Employers Implementing Reference-Based Pricing Benefit Design?" *American Journal of Managed Care*, vol. 25, no. 2 (February 2019), pp. 85–88, https://tinyurl.com/378c6smz.

44. See Matthew D. Eisenberg and others, "Large Self-Insured Employers Lack Power to Effectively Negotiate Hospital Prices," *American Journal of Managed Care*, vol. 27, no. 7 (July 2021), pp. 290–296, https://doi.org/10.37765/ajmc.2021.88702.

45. See Zach Y. Brown, "Equilibrium Effects of Health Care Price Information," *Review of Economics and Statistics*, vol. 101, no. 4 (October 2019), pp. 699–712, http://doi.org/10.1162/rest_a_00765.

46. See Ha Tu and Rebecca Gourevitch, *Moving Markets: Lessons From New Hampshire's Health Care Price Transparency Experiment* (California Health Care Foundation and Robert Wood Johnson Foundation, April 7, 2014), https://tinyurl.com/yrb3ek9v.

47. CBO arrived at the 47 percent estimate by excluding spending on prescription drugs from the estimates presented in Amanda Frost and David Newman, *Spending on Shoppable Services in Health Care*, Issue Brief 11 (Health Care Cost Institute, March 2016), https://tinyurl.com/3npnmkst.

48. See Christopher M. Whaley, "Provider Responses to Online Price Transparency," *Journal of Health Economics*, vol. 66 (July 2019), pp. 241–259, https://doi.org/10.1016/j.jhealeco.2019.06.001; and Christopher Whaley and others, "Association Between Availability of Health Service Prices and Payments for These Services," *JAMA*, vol. 312, no. 16 (October 22, 2014), pp. 1670–1676, https://doi.org/10.1001/jama.2014.13373.

49. See Xinke Zhang and others, "Does Enrollment in High-Deductible Health Plans Encourage Price Shopping?" *Health Services Research*, vol. 53, no. S1 (August 2018), pp. 2718–2734, https://doi.org/10.1111/1475-6773.12784; and Christopher Whaley, *Searching for Health: The Effects of Online Price Transparency* (October 2015), https://doi.org/10.2139/ssrn.2684809.

Several other factors suggest that findings from the most comprehensive study of New Hampshire's experience may understate the effects of a federal website on prices for shoppable services. First, New Hampshire is a small state where, in many cases, consumers have few options or only a single option for obtaining services. Those constraints give consumers less scope for price shopping. Second, the state's website was introduced in 2007, when fewer consumers may have been comfortable using the Internet to shop for health care (although use of the website remained low in more recent years as well).[50] Third, during the period when the effects of New Hampshire's website were being studied, the website did not include information about the quality of services.

Basis for CBO's Assessment. Adopting all of the price-transparency policies that CBO examined in this report would reduce commercial insurers' prices for hospitals' and physicians' services by a very small amount (0.1 percent to 1 percent) relative to the trajectory of those prices under current law. CBO based that assessment on estimates from the most comprehensive study of New Hampshire's experience, making adjustments to reflect how those estimates would correspond to the effects of the federal policies that could be mandated in legislation.[51] In CBO's view, the very small price reductions that would occur would result almost entirely from establishing a federal APCD with standardized reporting. CBO judged that changing existing federal regulations would have minimal additional effects because price reporting is already expected to increase under current law.

In CBO's assessment, the estimates from the New Hampshire study are the most relevant for projecting the potential effects of a federal APCD with standardized reporting because they reflect both the demand-side responses of consumers and employers and the supply-side responses of insurers and providers to a public reporting website that covers an entire statewide market. The study's author also estimated the effects of the policy from 2007, when the website was first implemented, through 2011, after it had been in place for five years and all relevant stakeholders had had time to respond. Other studies that CBO reviewed analyzed responses to price-transparency tools offered through employment-based plans. All but one of those studies focused solely on the responses of consumers and were not designed to capture any potential supply-side effects among providers and insurers or any responses by employers.[52] New Hampshire's website also has two features that facilitate price shopping: Members of the public can access it without needing to log in to an account, and it includes information on the prices negotiated by specific providers and insurers for a given service.

50. See Sunita M. Desai, Sonali Shambhu, and Ateev Mehrotra "Online Advertising Increased New Hampshire Residents' Use of Provider Price Tool but Not Use of Lower-Price Providers," *Health Affairs*, vol. 40, no. 3 (March 2021), pp. 521–528, https://doi.org/10.1377/hlthaff.2020.01039.

51. See Zach Y. Brown, "Equilibrium Effects of Health Care Price Information," *Review of Economics and Statistics*, vol. 101, no. 4 (October 2019), pp. 699–712, http://doi.org/10.1162/rest_a_00765.

52. CBO identified six studies of the effect of price-transparency tools offered by employers on average prices paid by employment-based plans. Five of the studies estimated demand-side effects among consumers who were offered a price-transparency tool by their employer. The effects estimated in those studies were reductions in average prices ranging from zero to 1.6 percent —all smaller than the 2 percent long-run price reduction attributed to demand-side responses by both consumers and employers in the New Hampshire study. However, those five studies estimated only short-term responses (typically after about a year) by consumers using tools other than a public website and did not capture employers' responses to marketwide price information. See Sunita Desai and others, "Association Between Availability of a Price Transparency Tool and Outpatient Spending," *JAMA*, vol. 315, no. 17 (May 3, 2016), pp. 1874–1881, http://doi.org/10.1001/jama.2016.4288; Sunita Desai and others, "Offering a Price Transparency Tool Did Not Reduce Overall Spending Among California Public Employees and Retirees," *Health Affairs*, vol. 36, no. 8 (August 2017), pp. 1401–1407, http://doi.org/10.1377/hlthaff.2016.1636; Ethan M. J. Lieber, "Does It Pay to Know Prices in Health Care?" *American Economic Journal: Economic Policy*, vol. 9, no. 1 (February 2017), pp. 154–179, http://doi.org/10.1257/pol.20150124; Christopher Whaley, Timothy Brown, and James Robinson, "Consumer Responses to Price Transparency Alone Versus Price Transparency Combined With Reference Pricing," *American Journal of Health Economics*, vol. 5, no. 2 (Spring 2019), pp. 227–249, http://doi.org/10.1162/ajhe_a_00118; and Christopher Whaley, *Searching for Health: The Effects of Online Price Transparency* (October 2015), https://doi.org/10.2139/ssrn.2684809.

    The other study estimated supply-side responses among providers to marketwide changes in consumers' price sensitivity resulting from tools offered by employment-based plans. That study found an additional reduction in average prices for laboratory services because providers accepted lower prices in their negotiations with insurers: Average prices declined by 1 percent when the share of consumers in a market who had access to a price-transparency tool increased by 5.6 percentage points. See Christopher M. Whaley, "Provider Responses to Online Price Transparency," *Journal of Health Economics*, vol. 66 (July 2019), pp. 241–259, https://doi.org/10.1016/j.jhealeco.2019.06.001.

To adjust the estimate from the New Hampshire study, CBO first accounted for the share of overall spending on hospitals' and physicians' services that would be affected most similarly to spending on the services analyzed in that study. The New Hampshire study focused on imaging services, which are among the services most amenable to price shopping. If a federal transparency tool included a broader set of services, the effect on average prices would be smaller, in CBO's estimation, because most services are less amenable to price shopping. Applying that study's estimate of a 4 percent reduction in prices for imaging services to the services that various studies indicate are the most shoppable would imply a reduction of about 0.5 percent in the average prices paid by commercial insurers.[53]

CBO made several additional adjustments to account for other differences between the study's setting, New Hampshire during the 2007–2011 period, and a national setting over the next 10 years. The most important difference is that when New Hampshire's website was introduced, no other publicly available sources of information about negotiated prices were available. By contrast, over the next 10 years, federal regulations will require hospitals and insurers to disclose their negotiated prices in machine-readable files. Third-party reporting of that price information is expected to become more comprehensive as insurers continue to release those files under the requirements that went into force this year. As a result, CBO expects that the additional price effect of a federal APCD and website similar to New Hampshire's would be about half as big as the price effect seen in New Hampshire from 2007 to 2011.

CBO expects that some aspects of the federal APCD policy that did not apply in New Hampshire's case could lead to modest additional reductions in prices. Those aspects include the nationwide scale of the federal policy and the ability of the public reporting tool to incorporate measures of quality and more current price information provided by hospitals and insurers under existing federal regulations. New Hampshire's reporting website did not include quality measures during the 2007–2011 period covered by the study. In CBO's assessment, a public reporting tool that included information about the quality of services could increase consumers' and employers' use of price information because they would be less likely to interpret low prices as a sign of low quality. Allowing federal agencies and other parties, such as state governments and researchers, to analyze the federal APCD for antitrust enforcement and other purposes would also lead to additional reductions in prices, in CBO's view.

CBO's assessment of the effects of federal transparency policies on the prices that commercial insurers pay providers is subject to considerable uncertainty because of limited information about the size of the effects and about the details of the policies themselves (see Box 2-1 on page 14). For instance, two major sources of uncertainty are determining how much transparency will improve under current law because of existing federal regulations and how much consumers, employers, providers, and insurers would respond to the additional price information that would be disclosed if lawmakers adopted policies under the price-transparency approach.

Another source of uncertainty is the theoretical ambiguity of the effects of transparency on prices. In theory, transparency could increase prices if it gave providers more information about what insurers were willing to pay or about what competing providers were willing to accept.[54] Studies of a small number of industries other than health care have shown that transparency can help competitors coordinate, resulting in higher prices.[55] Although such an effect is possible, many industries have transparent prices without evidence of such collusion.

Employers' responses to increased price transparency are particularly uncertain. One recent study estimated that prices for hospitals' services could decline by between 2.2 percent and 4.7 percent as a result of employers' responses to public reporting of price data from a

53. About 12 percent of commercial insurers' and enrollees' spending for hospitals' and physicians' services is for imaging and laboratory services delivered in outpatient or office-based settings. CBO determined that spending on those services would be affected most similarly to spending on the imaging services analyzed in the New Hampshire study.

54. See David Cutler and Leemore Dafny, "Designing Transparency Systems for Medical Care Prices," *New England Journal of Medicine*, vol. 364, no. 10 (March 10, 2011), pp. 894–895, https://doi.org/10.1056/nejmp1100540.

55. See Svend Albæk, Peter Møllgaard, and Per B. Overgaard, "Government-Assisted Oligopoly Coordination? A Concrete Case," *Journal of Industrial Economics*, vol. 45, no. 4 (December 1997), pp. 429–443, www.jstor.org/stable/2950610; and Fernando Luco, "Who Benefits From Information Disclosure? The Case of Retail Gasoline," *American Economic Journal: Microeconomics*, vol. 11, no. 2 (May 2019), pp. 277–305, www.jstor.org/stable/26641423.

federal APCD.[56] The authors of that study assumed that employers would use the information to adopt benefit designs that steered patients toward lower-cost providers but would not be able to push for lower negotiated prices for any given provider. However, CBO expects that the reduction in prices because of employers' responses would be much smaller than that estimate, at least within the first 10 years. The reason is that many employers would not make any changes in response to the new information because most of the causes of their lack of price sensitivity—including the diverse preferences of their workers and the complexity of the medical system—would remain.

CBO's assessment of how much various parties would respond to additional price information—and its view that transparency would generally reduce prices—is largely based on one study of one state's experience. Although that study had a strong methodology, CBO's adjustments to the study's estimates may not account for all of the reasons that the results may not apply to a federal policy. CBO's assessment is also uncertain because the effects of the policies would depend on the details included in legislation.

Policies That Cap the Level or Growth of Prices

The federal government could also reduce commercial insurers' prices for hospitals' and physicians' services by capping those prices through regulation, rather than by targeting the causes of high prices. In CBO's assessment, adopting the most comprehensive set of price-cap policies available through legislation—capping both the level and the annual growth of prices in all markets—would reduce prices by a moderate to large amount in the first decade relative to what they would be under current law.

Types of Policies

Lawmakers have three main ways to cap the prices that commercial insurers pay providers. The first way would involve capping the level of prices by setting maximum amounts that hospitals and physicians could receive from commercial insurers for specific services or groups of services. The second way would involve capping the growth of those prices by placing a limit on the annual price increases that providers could command in their negotiations with insurers. The third way would make it more costly for providers to charge high prices by taxing services whose prices exceeded a certain threshold. In some cases, such a tax would operate like a cap on the level of prices; in other cases, the effects of the tax would differ from those of a cap.

Policies That Cap the Level of Prices. One option for regulating prices would be to cap the level of prices that commercial insurers could pay providers in their networks as well as providers outside their networks. Under such a policy, the government would specify the maximum amount that a provider could receive for a specific type of service provided either in or out of network. Providers and insurers would be free to negotiate prices that were lower than those maximums.

The price-cap system could be designed to cap the price for each individual service (such as a 15-minute office visit or an inpatient stay for childbirth by cesarean section) or the average price for a group of services (such as all hospital services paid for by a particular insurer, with each service weighted to reflect its complexity).[57] Applying the caps to individual services would generally affect more prices than applying the caps to a group of services.

The caps could be specified in many ways—for example, as a certain percentile in the distribution of prices paid by commercial insurers for a given service or as a specific multiple of the prices paid by Medicare's fee-for-service program. A price-cap system based on the distribution of prices paid by commercial insurers could allow the size of the caps to vary by state or local area to account for geographic differences in the costs of providing care. (The prices paid by Medicare FFS take into account geographic differences in the costs of providing care, so a price-cap system based on a multiple of those prices would already reflect such geographic differences.)

Alternatively, rather than capping prices for services provided in or out of network, the government could cap out-of-network prices only.[58] Under such a policy,

56. See Jodi L. Liu and others, *Impact of Policy Options for Reducing Hospital Prices Paid by Private Health Plans* (RAND Corporation, 2021), https://doi.org/10.7249/RRA805-1.

57. See the discussion in Michael E. Chernew, Maximilian J. Pany, and Leemore S. Dafny, "Two Approaches to Capping Health Care Prices," *Health Affairs Forefront* (March 31, 2022), https://doi.org/10.1377/forefront.20220329.385487.

58. Ibid. Also see Robert A. Berenson and Robert B. Murray, "How Price Regulation Is Needed to Advance Market Competition," *Health Affairs*, vol. 41, no. 1 (January 2022), pp. 26–34, https://doi.org/10.1377/hlthaff.2021.01235; and Erin L. Duffy, Christopher Whaley, and Chapin White, *The Price and Spending Impacts of Limits on Payments to Hospitals for Out-of-Network Care* (RAND Corporation, 2020), www.rand.org/pubs/research_reports/RR4378.html.

the caps would apply to a much smaller share of prices than they would under the broader policy: Between 2 percent and 7 percent of commercial insurers' spending on hospitals' services and between 8 percent and 14 percent of their spending on physicians' services is for out-of-network care.[59] However, caps on out-of-network prices would also affect the prices negotiated for in-network care.

Under current law, the federal government regulates out-of-network prices in three main ways. First, the amounts that private Medicare Advantage plans pay for out-of-network care cannot exceed the prices paid by Medicare FFS. Moreover, providers cannot bill enrollees in Medicare Advantage plans for any amount in excess of the amounts that Medicare FFS pays. Those regulations, along with the presence of Medicare FFS as an alternative to Medicare Advantage, have allowed Medicare Advantage plans to negotiate in-network prices that are very close to the prices paid by Medicare FFS.[60]

Second, since the 1980s, the federal government has restricted the balance billing of Medicare FFS patients (in which providers charge patients for the remainder of what their insurance does not pay). That restriction on balance billing has resulted in reduced out-of-pocket costs for Medicare beneficiaries, with no observable changes in their access to care.[61]

Third, the No Surprises Act, enacted in 2020, regulates some out-of-network prices for services delivered to commercially insured patients under circumstances in which they cannot choose their provider. Specifically, the law set limits on patients' out-of-pocket costs for those services and established an independent dispute-resolution process to determine the amounts that insurers must pay providers for those services when the two parties cannot reach an agreement.[62] A federal cap on out-of-network prices would go beyond those regulations by subjecting all out-of-network services to the limits and by specifying a precise level at which prices were capped.

Policies That Cap the Growth of Prices. Another way to regulate prices is to cap their annual growth. Under a growth-rate cap, the prices that providers and insurers negotiated could increase by no more than the rate specified under the cap each year. The cap could be specified as a fixed percentage or could reference a benchmark figure, such as the growth rate of the consumer price index or Medicare's market-basket index of the prices of labor and other inputs used by providers. Several states have implemented or considered caps on the growth rate of prices for health care services.[63] For example, Rhode Island limits the annual rate of increase in hospitals' prices to either the increase in the consumer price index plus 1 percentage point or a percentage based on quality-incentive payments. A cap on price growth could also be combined with a cap on the level of prices.[64]

Policies That Tax Prices Above a Certain Threshold. Instead of placing a cap on prices, lawmakers could impose a tax on payments for services that exceeded a

59. See Michael E. Chernew, Leemore S. Dafny, and Maximilian J. Pany, *A Proposal to Cap Provider Prices and Price Growth in the Commercial Health-Care Market*, Policy Proposal 2020-08 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/y47w67b4.

60. See Erin Trish and others, "Physician Reimbursement in Medicare Advantage Compared With Traditional Medicare and Commercial Health Insurance," *JAMA Internal Medicine*, vol. 177, no. 9 (September 2017), pp. 1287–1295, https://doi.org/10.1001/jamainternmed.2017.2679; and Robert A. Berenson and others, "Why Medicare Advantage Plans Pay Hospitals Traditional Medicare Prices," *Health Affairs*, vol. 34, no. 8 (August 2015), pp. 1289–1295, https://doi.org/10.1377/hlthaff.2014.1427.

61. See Robin McKnight, "Medicare Balance Billing Restrictions: Impacts on Physicians and Beneficiaries," *Journal of Health Economics*, vol. 26, no. 2 (March 2007), pp. 326–341, https://doi.org/10.1016/j.jhealeco.2006.09.001.

62. Under that law, the independent dispute-resolution entities are directed to consider a range of factors when determining an appropriate price, but the numeric benchmark specified in the law is the median in-network rate for a given service in a given market. In CBO's estimation, if the small number of cases that go to arbitration are resolved by insurers' paying providers the median in-network amount, spending will decline—both because the median in-network price is typically well below the average price for all services, and because providers will be more likely to agree to lower prices if there is limited gain to staying out of network and bargaining for a higher price.

63. See Ann Hwang and others, *State Strategies for Slowing Health Care Cost Growth in the Commercial Market* (Commonwealth Fund, February 2022), https://tinyurl.com/ywfjd5e5.

64. See Michael E. Chernew, Leemore S. Dafny, and Maximilian J. Pany, *A Proposal to Cap Provider Prices and Price Growth in the Commercial Health-Care Market*, Policy Proposal 2020-08 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/y47w67b4; and Bob Kocher and Donald M. Berwick, "While Considering Medicare for All: Policies for Making Health Care in the United States Better," *Health Affairs Forefront* (June 6, 2019), https://doi.org/10.1377/forefront.20190530.216896.

certain threshold.[65] Under such a tax, providers that were paid more than the threshold would have to lower their prices to avoid the tax, leave their prices unchanged and absorb the cost of the tax, or raise their prices to pass all or some of the cost of the tax on to health care consumers. How most providers would respond would mainly depend on the size of the tax and the level of the threshold. If the tax was large enough, it would operate like a cap, inducing all providers with prices above the threshold to decrease their prices to just below the threshold.

How providers would respond to a tax on prices above a certain threshold would also depend on their market power and their financial solvency. Providers with market power—including those with a dominant share of a market or a reputation for high quality—would be more likely to raise their prices to pass the cost of the tax on to consumers. Some providers with small operating margins whose prices were subject to the tax, such as some rural hospitals, might not be able to remain in business unless they could raise their prices to offset the cost of the tax. However, policy analysts have described ways to structure the tax to avoid some anticipated undesirable outcomes and to achieve other policy goals. For example, lawmakers could exempt rural hospitals from the tax and use the tax revenues to expand federal subsidies for health insurance premiums.[66]

How Price-Cap Policies Would Affect Prices

In CBO's assessment, capping both the level and growth of prices in all markets would reduce commercial insurers' prices for hospitals' and physicians' services by at least a moderate amount (from more than 3 percent to 5 percent), as long as the caps were set lower than at least a small share of prevailing prices. Some ways of implementing the caps would reduce prices by a large amount (more than 5 percent). If adopted in isolation, a cap on the growth of prices might have small or very small effects over the first 10 years, but it could have larger effects over the long term (see Box 2-2 on page 19). Some ways of designing a tax on high prices would reduce average prices by smaller amounts—or possibly even increase them—because certain providers (particularly those with market power) would raise their prices to pass the costs of the tax on to health care consumers. Other ways to design the tax would reduce average prices in a similar manner and to a similar extent as price caps.

Ultimately, price reductions under any of the policies would depend on how the policy was designed. Price caps would also counteract providers' incentives to seek higher prices through consolidation, providing an additional mechanism for counteracting price increases that could result in savings that grew over time.

Application of the Caps. In general, caps that were applied broadly would cause the greatest reductions in prices. Capping the level of prices would have the largest effect if the caps applied to both in-network and out-of-network prices, but a cap on out-of-network prices would also affect in-network prices by changing the relative bargaining power of insurers and providers. The amounts that providers receive for out-of-network care determine their next best alternative to agreeing to an in-network price with an insurer. A cap on out-of-network prices would reduce the value of that next best alternative, giving providers less leverage in their negotiations with insurers.

Caps that were applied narrowly would have smaller effects. Some proposed caps would apply only in locations with highly concentrated hospital markets.[67] Those caps would have a smaller effect than caps that applied nationwide because many of the highest-priced hospitals are not located in concentrated markets.[68] Other proposed caps would cover prices paid by nongroup health plans but not prices paid by employment-based plans.[69] Those caps would have a much smaller effect on the overall prices paid by commercial insurers because only about 10 percent of people with commercial insurance are enrolled in nongroup plans (although capping the prices paid by those plans could boost their enrollment).[70] Caps could also cover only prices for hospitals' services, but applying the caps to both hospitals' and physicians' services would have a larger effect. Similarly,

65. See Katherine L. Gudiksen, Darien Shanske, and Jaime S. King, "Can Taxes Help Address High Health Care Prices?" *Health Affairs Forefront* (April 25, 2022), https://doi.org/10.1377/forefront.20220421.477471.

66. Ibid.

67. See Avik Roy, *Improving Hospital Competition: A Key to Affordable Health Care* (Foundation for Research on Equal Opportunity, January 16, 2019), https://tinyurl.com/tum97sau.

68. See Maximilian J. Pany, Michael E. Chernew, and Leemore S. Dafny, "Regulating Hospital Prices Based on Market Concentration Is Likely to Leave High-Price Hospitals Unaffected," *Health Affairs*, vol. 40, no. 9 (September 2021), pp. 1386–1394, https://doi.org/10.1377/hlthaff.2021.00001.

69. See Zirui Song, "Making the Affordable Care Act Marketplace More Affordable," *JAMA Health Forum*, vol. 2, no. 5 (May 2021), article e210276, https://doi.org/10.1001/jamahealthforum.2021.0276.

70. See Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People Under 65: 2022 to 2032* (June 2022), www.cbo.gov/publication/57962.

the more broadly taxes were applied, the greater their effect would be. Applying caps or taxes more broadly would also reduce providers' ability to circumvent the limits by shifting services to different sites of care.

Size of the Caps. To have any effect, caps on the level of prices would need to be lower than at least a small percentage of the prices negotiated by commercial insurers and providers under current law. Some of the policy proposals that CBO reviewed would cap prices at levels well above the median prices negotiated by insurers and providers under current law and well above the prices paid by Medicare FFS.[71] Those proposals would allow negotiated prices to prevail for the vast majority of services under the cap. Although the caps in those proposals would apply to only a small percentage of services, they would still cause a moderate reduction in average prices because the prices they would affect are very high. Other proposals would set caps much closer to the prices paid by Medicare FFS and would affect a much larger percentage of providers and services.[72] Those proposals would lead to larger overall reductions in prices.

Enforcement of the Caps or Taxes. Enforcement mechanisms are an important design element of price-cap and tax policies because they prevent providers and insurers from circumventing the caps or taxes. Policies that include strong enforcement mechanisms would have larger effects on prices than policies with more limited enforcement mechanisms. One proposed policy would enforce price caps by requiring all providers to accept a default contract that included prices set equal to the caps if they did not negotiate an alternative set of prices with an insurer.[73] Under another proposed policy, growth in insurance premiums or per-enrollee health care spending that exceeded a certain threshold would trigger regulatory review.[74] Regularly reviewing some of the contracts negotiated by insurers and providers is another way to enforce a price-cap system.

Any policy would need to incorporate ways to ensure that the use of nonstandard payments, such as quality bonus payments, did not circumvent the tax or cap on prices. Insurers' and providers' responses to such a policy, including the use of nonstandard payments, could dampen the policy's effects, but a comprehensive price-cap system would still result in moderate to large net reductions in prices.

Basis for CBO's Assessment. Because of the many ways to design a price-cap system, a wide range of effects on prices is possible. Estimates by other analysts indicate that proposals to cap both the level and growth of prices, or even just the level of prices, in all markets would reduce average prices by moderate to large amounts, even for caps that were set high enough to affect only a small share of the prices negotiated under current law.[75] Very small to small reductions in prices would tend to occur only in cases in which the caps were applied narrowly, such as only to the nongroup market or only to areas with highly concentrated hospital markets. Small or very small price reductions would also be possible if lawmakers chose to set the caps at a level that was higher than the levels specified in any of the proposals that CBO reviewed.

CBO is not aware of any published estimates of the effect of taxing high prices for hospitals' and physicians' services. The agency based its assessment of the effect of such a tax on how businesses have responded to taxes in other settings.[76]

71. See, for example, Michael E. Chernew, Leemore S. Dafny, and Maximilian J. Pany, *A Proposal to Cap Provider Prices and Price Growth in the Commercial Health-Care Market*, Policy Proposal 2020-08 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/y47w67b4.

72. See Bob Kocher and Donald M. Berwick, "While Considering Medicare For All: Policies for Making Health Care in the United States Better," *Health Affairs Forefront* (June 6, 2019), https://doi.org/10.1377/forefront.20190530.216896; Jonathan Skinner, Elliott S. Fisher, and James Weinstein, "The 125 Percent Solution: Fixing Variations in Health Care Prices," *Health Affairs Forefront* (August 26, 2014), https://doi.org/10.1377/forefront.20140826.041002; and Committee for a Responsible Federal Budget, *Capping Hospital Prices: Health Savers Initiative* (February 2021), www.crfb.org/papers/capping-hospital-prices.

73. See Matthew Fiedler, *Capping Prices or Creating a Public Option: How Would They Change What We Pay for Health Care?* (USC-Brookings Schaeffer Initiative for Health Policy, November 2020), https://tinyurl.com/umrmtk6u.

74. See Michael E. Chernew, Leemore S. Dafny, and Maximilian J. Pany, *A Proposal to Cap Provider Prices and Price Growth in the Commercial Health-Care Market*, Policy Proposal 2020-08 (Hamilton Project, Brookings Institution, March 2020), https://tinyurl.com/y47w67b4.

75. Ibid., and Jodi L. Liu and others, *Impact of Policy Options for Reducing Hospital Prices Paid by Private Health Plans* (RAND Corporation, 2021), https://doi.org/10.7249/RRA805-1.

76. See Congressional Budget Office, *Options for Reducing the Deficit: 2019 to 2028* (December 2018), p. 201, www.cbo.gov/publication/54667.

Chapter 3: How Policies That Reduce the Prices Paid by Commercial Health Insurers Would Affect the Federal Budget

The federal tax code contains various provisions that subsidize commercial health insurance—both employment-based plans and nongroup (individually purchased) plans. For example, premiums for people with employment-based insurance are generally excluded from federal income and payroll taxes. In addition, some out-of-pocket medical costs and premium payments are subsidized through the tax deduction for itemized medical expenses. The federal government also provides qualifying people with tax credits to reduce premiums for nongroup health insurance purchased through the marketplaces established under the Affordable Care Act (ACA). And the tax code allows some self-employed people who buy nongroup insurance to deduct up to 100 percent of their premiums from their income.

Policies that lower the prices paid by commercial health insurers for hospitals' and physicians' services would reduce the federal budget deficit, primarily through their effects on health insurance premiums. In the Congressional Budget Office's assessment, many commercial insurers would pass most of their savings from lower prices along to customers by reducing premiums for their plans (because of competition among insurers, insurance regulations, and other factors). Reductions in premiums would in turn decrease federal subsidies for health insurance in three key ways: by increasing tax revenues (because the amount of premiums excluded from taxable income would be lower), by reducing premium tax credits for people who buy plans through the marketplaces established under the ACA, and by reducing subsidies for health insurance for self-employed people.

Policies that lower the prices paid by commercial insurers could also have an impact on the budget through their effects on health insurance coverage and the use of health care services. Although some of those effects might partly offset the savings from lower subsidies, the net impact of each of the three broad policy approaches that CBO described in Chapter 2 would be to reduce the federal deficit.

Those policy approaches could have other effects as well—such as on health care quality and people's access to care—so lawmakers would face trade-offs in implementing the policies. Examples of those other effects are described broadly in this report (see Box 3-1), although the effects of any particular policy could vary.

Effects on Federal Subsidies for Insurance Premiums

Policies aimed at reducing the prices paid by commercial insurers would chiefly affect the federal budget by reducing federal subsidies for health insurance premiums. Lower prices would result in lower premiums for commercial insurance as many health insurers passed most of their cost savings on to purchasers. The lower premiums would reduce federal subsidies for employment-based and nongroup coverage. Such subsidies for people under age 65 are estimated to cost the federal government $405 billion in fiscal year 2022, so even small changes in premiums because of lower prices paid to providers would lead to sizable reductions in the federal deficit.[1]

Effects of Lower Prices on Premiums

The prices paid to providers are an important determinant of premiums for commercial health insurance. Those premiums reflect insurers' expected spending on claims, administrative expenses, and profits. Lower prices for hospitals' and physicians' services would reduce insurers' spending on health care claims for those services. In CBO's assessment, roughly 85 percent to 90 percent of the reduction in health care spending by insurers would be passed along as a reduction in premiums for employment-based plans, and nearly 100 percent of the reduction in health care spending would translate into lower premiums for nongroup plans. In the market for employment-based plans, some of the reduction in spending on claims would be allocated toward changes to health insurance benefits (for example, employers might

1. See Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People Under 65: 2022 to 2032* (June 2022), www.cbo.gov/publication/57962.

Box 3-1.

Other Effects of the Policy Approaches in This Analysis

Lowering the prices that commercial insurers pay for hospitals' and physicians' services would have additional effects beyond the impact on the federal budget. Health care providers would experience decreases in their income and might see smaller profits, and employment in the health care sector could be reduced. People with commercial insurance would be affected as well: They would experience lower out-of-pocket costs for health care and lower premiums. Wages for people with employment-based coverage would rise because employers would redirect at least some of their savings from paying lower health insurance premiums toward wages. Employment outside the health care sector could increase because of the lower costs to employers of providing health insurance benefits.

The effects of the policy approaches described in this report on the quality of health care and access to care are uncertain. Those effects would depend on how providers and patients responded to lower prices. If providers reacted to lower prices by delivering fewer high-value services or by cutting back on staffing or other inputs to care, some measures of quality and access would decline. Such effects would be more likely to occur if the price reductions were very large. Other measures of quality and access could improve because lower prices would mean lower premiums and cost-sharing requirements in commercial insurance plans, which could increase both new and current enrollees' use of health care, including high-value services. Alternatively, the price reductions caused by some policies might be too small to have any effect on health care quality or access.

make benefits more generous). In the nongroup market, plans are highly regulated in terms of the benefits they cover and the amount enrollees can pay for those benefits, so there would be less opportunity for savings to be channeled into expansions of benefits.

Those estimates, which are highly uncertain, are based on the research literature and on consultations with actuaries, employer benefit experts, and insurers. The estimate of the share of insurers' savings on claims that would translate into lower premiums mainly reflects the assessment that small decreases in insurers' spending on claims would be very likely to be passed along in the form of lower premiums, whereas larger reductions in such spending would be more likely to be partly offset by changes to health insurance benefits.

Effects of Lower Premiums on the Federal Budget

Lower premiums for commercial insurance would lead to budgetary savings because they would reduce federal subsidies for health insurance, all else being equal. Subsidies for employment-based plans would decline, in CBO's assessment, as employers passed the savings from lower premiums on to workers in the form of higher taxable wages, increasing federal revenues.[2] Subsidies for nongroup plans would decline because smaller premium tax credits would be needed to cover the difference between the premiums for a marketplace's benchmark plan (the second-lowest-cost silver plan available in a region) and the income-based amount that consumers are required to contribute toward purchasing coverage.

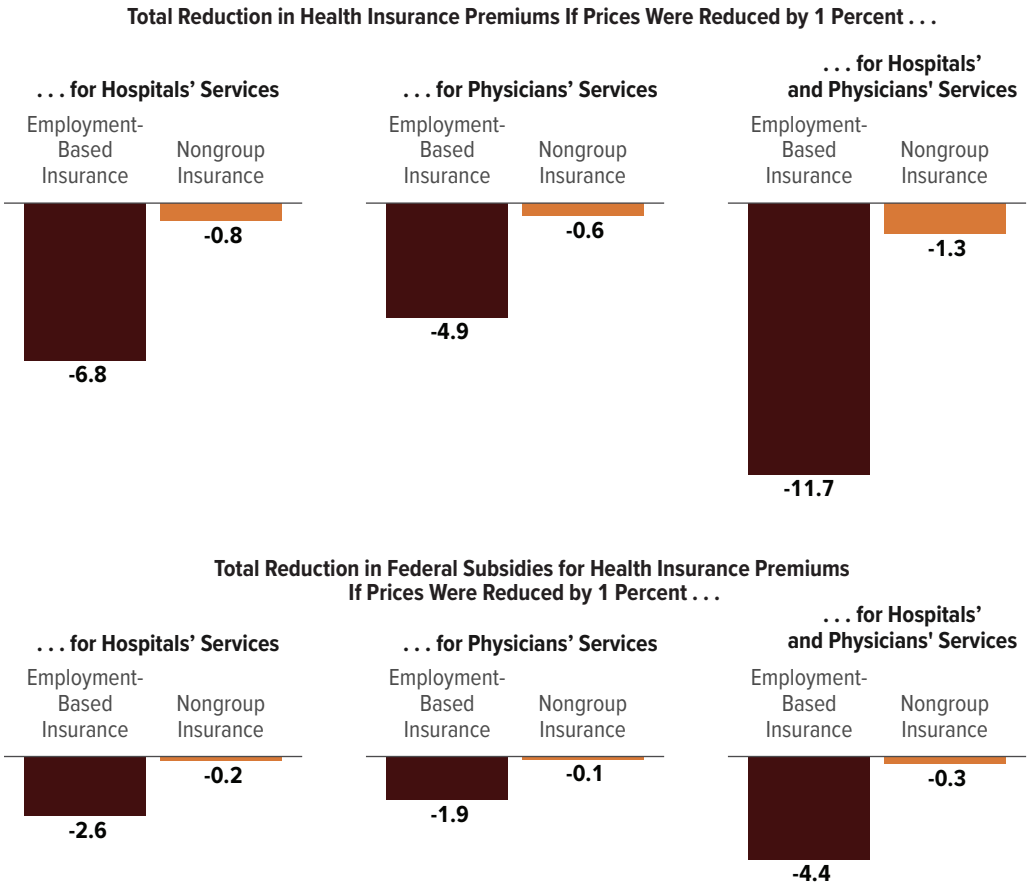
To demonstrate how lowering the prices paid by commercial insurers would directly affect the budget by reducing federal subsidies for premiums, CBO estimated how an illustrative policy that lowered prices for hospitals' and physicians' services by 1 percent would affect health insurance premiums and federal subsidies 10 years from now (see Figure 3-1). In CBO's assessment, such a policy would reduce the budget deficit in 2032 by $4.8 billion, or about 0.2 percent of the deficit projected for that year in CBO's baseline. The 1 percent decrease in prices would lead total spending on commercial health insurance premiums to decline by $13.0 billion. That reduction in premiums would occur because spending on hospitals' and physicians' services, which is projected to total $1,473 billion in 2032, would decline by $14.7 billion (1 percent) and because a large share of the reduction in spending would be passed through to

2. For an analysis of that effect and a discussion of related literature, see Daniel Arnold and Christopher Whaley, *Who Pays for Health Care Costs? The Effects of Health Care Prices on Wages*, WR-A621-2 (RAND Corporation, 2020), https://doi.org/10.7249/WRA621-2. If savings to employers from lower premiums were not passed on fully to workers, they would increase business income and boost revenues from taxes on that income.

Figure 3-1.

Budgetary Effects of an Illustrative Policy That Would Reduce the Prices Commercial Insurers Paid for Hospitals' and Physicians' Services by 1 Percent in 2032

Billions of Dollars



CBO estimates that under current law, hospitals and physicians would be paid $1,473 billion by commercial insurers in 2032. If the prices paid by commercial insurers were reduced, premiums would decline, which would reduce federal subsidies.

Data source: Congressional Budget Office. See www.cbo.gov/publication/58222#data.

Federal subsidies for health insurance premiums include tax provisions that exclude premiums for people with employment-based insurance from federal income and payroll taxes, tax credits to reduce premiums for insurance purchased individually through the marketplaces established under the Affordable Care Act, and provisions that allow some self-employed people who buy nongroup (individually purchased) insurance to deduct premiums from their income.

purchasers in the form of lower premiums, CBO estimates. Most of the reductions in premiums would be for employment-based health insurance, because many more people are enrolled in those plans; a smaller amount would be for insurance purchased through the nongroup market. Those reductions in premiums would lead to decreases in federal subsidies for both types of plans.

Other Effects on the Budget

Although policies that reduce the prices paid by commercial insurers would mainly affect the budget by lowering federal subsidies for health insurance, those policies would have several other budgetary effects, including some offsetting ones. The other budgetary effects would stem from factors such as the costs of implementing the policies, changes in the number of people enrolled in health insurance plans, changes in the use of hospitals' and physicians' services, and the policies' impact on spending for federal health care programs such as Medicare and Medicaid. CBO anticipates that any offsetting effects would be smaller than the $4.8 billion in savings in 2032 from the direct effect on federal subsidies. The savings could be larger if the policies resulted in any responses that reinforced the budgetary effects, such as reductions in the number or complexity of health care services used.

Implementation Costs

Many of the policies included in this report would require federal spending to implement. For example, a federal all-payer claims database would require staff to oversee and maintain the APDC and information technology infrastructure to house the data. Such implementation costs would generally be smaller than the price reductions a policy would generate, in CBO's assessment. Those costs would also be subject to the appropriation of the necessary funds, which would affect whether CBO would incorporate implementation spending into its cost estimates for legislation establishing a policy.

Price reductions from one policy described in Chapter 2—providing more funding to the Federal Trade Commission and the Department of Justice to enforce antitrust laws—would not be reflected in CBO's cost estimates, because Congressional scorekeeping guidelines prevent CBO from including any reductions in mandatory spending or increases in revenues that result from increasing agencies' funding without expanding their authority. If that policy was adopted by itself, the implementation costs would be the only part of the budgetary effect included in CBO's cost estimates.[3] However, CBO expects that increases in funding would allow the FTC and DOJ to increase their enforcement of antitrust laws, thereby generating reductions in prices for providers. The price assessments included in this report reflect that expectation and thus differ from what CBO would project in a cost estimate.

Effects on Health Insurance Coverage

More people tend to enroll in health insurance plans when premiums are lower. As a result, CBO expects that policies that reduce the prices paid by commercial insurers would result in more people gaining health insurance coverage. For the range of premium reductions discussed in this report, the resulting boost in enrollment would increase federal subsidies for health insurance premiums by a small amount. That increase would be much smaller than the reduction in federal subsidies that would occur because of lower premiums.

Effects on the Use of Health Care Services

Policies that reduce commercial insurers' prices for hospitals' and physicians' services could either increase or decrease the use of those services, which would affect subsidies for health insurance and outlays for Medicare and Medicaid. The direction of those effects would depend on the particular policies that were adopted. In any case, such effects would be unlikely to outweigh the reductions in federal subsidies stemming from reductions in premiums. Given the uncertainty of how those effects would ultimately change federal spending, CBO does not currently incorporate those effects into cost estimates for most policies that would alter the prices paid by commercial insurers.

One way policies that reduce commercial insurers' prices for providers could affect the use of health care services would be to affect how much health care people with commercial insurance use. Research has shown that doctors and hospitals tend to provide fewer or less intensive services when the prices for those services are lower.[4] Consequently, if commercial insurers paid lower prices, the use of health care services by people with commercial insurance would probably decline by a small amount. Lower prices could also increase demand for health care services by people with commercial insurance, but that effect would probably be smaller than doctors' and hospitals' changes in the supply of services, in part because plans' cost-sharing provisions would reduce the size of the price reductions that consumers experienced. Any reductions in the use of health care services by people with commercial insurance would lead to lower premiums and further reductions in federal subsidies, beyond those resulting from the direct effects of prices on premiums and subsidies.

Policies that reduce the prices paid by commercial insurers could increase the use of health care services in other ways. For instance, if commercial insurers paid lower prices, the differences between their prices and those paid by Medicare and Medicaid would narrow. If providers found it more attractive to serve Medicare or Medicaid patients as a result, the use of services in those programs could increase.

Other Effects

Some of the policies in this report would affect the federal budget in other ways as well. For example, expanding site-neutral payments in the Medicare program could reduce federal spending for Medicare by decreasing payments for services provided at more-expensive sites of care.

3. See guidelines 3 and 14 in Congressional Budget Office, *CBO Explains Budgetary Scorekeeping Guidelines* (January 2021), www.cbo.gov/publication/56507.

4. See Congressional Budget Office, *How CBO Analyzes the Costs of Proposals for Single-Payer Health Care Systems That Are Based on Medicare's Fee-for-Service Program*, Working Paper 2020-08 (December 2020), www.cbo.gov/publication/56811.

Appendix A: Other Federal Legislative Actions That Could Reduce the Prices Paid by Commercial Health Insurers

In addition to the policy approaches described in Chapter 2, the Congressional Budget Office identified five other types of policies within the historical purview of the Congress that have the potential to reduce the prices that commercial insurers pay for hospitals' and physicians' services. CBO did not include the policies in its analysis because their primary purpose is not to address the prices for those services. Instead, the policies would primarily target other outcomes, such as federal tax revenues, sources of health insurance coverage, or patients' access to care. (Other policy approaches that do not fall within the historical purview of the Congress but that could be pursued by federal agencies, states, or employers are discussed in Appendix B.)

Reducing Tax Preferences for Employment-Based Coverage

The federal government subsidizes employment-based health insurance by, in most cases, excluding employers' and employees' contributions to the cost of that insurance from federal income and payroll taxes. That tax exclusion encourages employers to offer health benefits rather than additional taxable wages. It also encourages workers to enroll in employment-based plans rather than purchasing plans by themselves in the nongroup market or going without coverage. In addition, the tax exclusion gives employers an incentive to offer, and employees an incentive to enroll in, plans with more generous benefits, such as those with lower cost-sharing requirements or broader networks that include higher-priced providers. Although many employers now offer plans that require significant out-of-pocket costs, such as high-deductible health plans, employment-based plans are still more generous than they would be without the tax exclusion.

Policies that reduce the tax exclusion for employment-based coverage would increase federal tax revenues, particularly from higher-income households, which generally receive the largest subsidies under current law. Employers would have an incentive to offer plans with less generous benefits than under current law, and employees with access to such plans would be more likely to enroll in them. Those policies could also lead more people to enroll in nongroup plans, if fewer employers offered health insurance because of the policies.[1]

Those changes in the types of plans that people enroll in could reduce the prices paid to providers by commercial insurers. Shifting some people with employment-based coverage to less generous plans could lower prices if those plans excluded high-priced providers or effectively encouraged people to choose lower-priced providers. And greater enrollment in nongroup plans could decrease prices because those plans tend to pay lower prices than employment-based plans do.[2]

Introducing or Changing Sources of Coverage

Policies that introduce new sources of health insurance coverage or change people's sources of coverage could also affect the prices that commercial insurers pay providers. For example, introducing a public option (a federally administered health insurance plan) in the nongroup market could reduce the prices paid by

1. See Congressional Budget Office, "Reduce Tax Subsidies for Employment-Based Health Insurance," in *Options for Reducing the Deficit: 2019 to 2028* (December 2018), www.cbo.gov/budget-options/54798.

2. See Daria Pelech and Karen Stockley, "How Price and Quantity Factors Drive Spending in Nongroup and Employer Health Plans," *Health Services Research*, vol. 57, no. 3 (June 2022), pp. 624–633, https://doi.org/10.1111/1475-6773.13962; and Adam I. Biener and Thomas M. Selden, "Public and Private Payments for Physician Office Visits," *Health Affairs*, vol. 36, no. 12 (December 2017), pp. 2160–2164, https://doi.org/10.1377/hlthaff.2017.0749.

commercial insurers in that market by increasing their ability to negotiate lower rates with providers.[3]

Other policies that would shift people from employment-based coverage to nongroup coverage could also reduce prices, for the same reasons that reducing the tax exclusion for employment-based coverage would. One such policy is to eliminate the firewall that prohibits people from qualifying for federal subsidies to buy nongroup coverage through the marketplaces established under the Affordable Care Act if they have an affordable offer of comprehensive coverage through their employer. Other types of policies that would shift people to nongroup plans include larger-scale proposals that would substantially reduce or eliminate employment-based coverage.[4]

Eliminating Medical Loss Ratio Requirements

Under current law, many health insurers must spend at least a certain percentage of their revenues from premiums on health care claims and quality-improvement activities or else pay rebates to enrollees. That requirement limits the percentage of insurers' income from premiums, though not the total dollar amount, that they can retain as profits. Such medical loss ratio (MLR) requirements are intended to constrain premiums by limiting insurers' administrative costs and profits. But some insurers have complied with the requirements by increasing their spending on health care services and other qualified activities rather than by reducing premiums.[5] Some evidence suggests that insurers did so by decreasing their utilization management (in which coverage of health care services is subject to requirements, such as the submission of clinical documentation), allowing enrollees to use more services than they would otherwise.

Eliminating MLR requirements might give insurers an incentive to reduce health care spending for plans in which they would have spent less than the required share of their premium revenues on claims or quality improvement. Although insurers could reduce their spending by negotiating lower prices with providers, evidence suggests that they are more likely to do so by lowering their enrollees' use of services.

Many plans would be unaffected by the elimination of MLR requirements because those rules do not apply to self-insured plans, which account for more than 60 percent of enrollment in commercial health insurance.[6] Some plans that are subject to the requirements would also be unaffected if they were already spending more than the required share of their premium revenues on qualified expenses.

Expanding Access to Telehealth Services

Until recently, the practice of providing health services through telecommunications (such as video conferencing) was not widely used, and insurance coverage for services delivered through telehealth was uneven among both public and private payers. During the COVID-19 pandemic, however, the use of telehealth grew dramatically, in part because of changes in Medicare policy. Those changes allowed providers to bill the same amount for telehealth services as they did for in-person services and eased restrictions on where the services could be provided. Medicare made those changes to ensure that patients would continue to have access to care while maintaining social distancing, and commercial insurers generally followed suit.

The recent shift toward more generous insurance coverage of telehealth services increased some patients' access to care.[7] Maintaining those changes would expand the pool of patients who could use telehealth services, thus encouraging more providers to incur the fixed costs of

3. See Congressional Budget Office, *A Public Option for Health Insurance in the Nongroup Marketplaces: Key Design Considerations and Implications* (April 2021), www.cbo.gov/publication/57020.

4. For further discussion, see Congressional Budget Office, *Policies to Achieve Near-Universal Health Insurance Coverage* (October 2020), pp. 29–31, www.cbo.gov/publication/56620.

5. See Steve Cicala, Ethan M. J. Lieber, and Victoria Marone, "Regulating Markups in U.S. Health Insurance," *American Economic Journal: Applied Economics*, vol. 11, no. 4 (October 2019), pp. 71–104, www.jstor.org/stable/26794322; and Jean M. Abraham, Pinar Karaca-Mandic, and Kosali Simon, "How Has the Affordable Care Act's Medical Loss Ratio Regulation Affected Insurer Behavior?" *Medical Care*, vol. 52, no. 4 (April 2014), pp. 370–377, https://doi.org/10.1097/MLR.0000000000000091.

6. See Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People Under 65: 2022 to 2032* (June 2022), www.cbo.gov/publication/57962. Employers with self-insured plans bear the financial risk of paying the health care costs of employees and their families rather than paying an insurer to assume that risk.

7. See Larry Levitt, "The Uncertain Future of Policies to Promote Access and Affordability Put in Place During the COVID-19 Pandemic," *JAMA Health Forum*, vol. 3, no. 5 (May 2022), article e221980, https://doi.org/10.1001/jamahealthforum.2022.1980.

investing in the necessary technologies and increasing the number of providers competing (in person and virtually) in each market, which could reduce prices. Those effects on prices could be greater if they were coupled with policies that promote cross-state licensing for providers. However, because policies to broaden coverage of telehealth would expand the capacity of the health care system, they could also increase the volume of services provided to both privately and publicly insured people, offsetting some or all of the savings from any potential reductions in prices paid to providers.

Increasing the Number of Physicians

Concerns about access to care and shortages of providers have spurred calls to increase the number of practicing physicians or other medical professionals. Some proposals would aim to do that by increasing the number of physician trainees each year. For example, lawmakers could increase the number of Medicare-funded residency slots, which are currently subject to a cap based on the number of Medicare-funded residents each hospital had in 1996.[8] Policies that raise the cap could increase the supply of physicians and ease provider shortages in some areas. Increasing the number of physician trainees could also increase competition in the long term, putting downward pressure on the prices paid to providers by commercial insurers. The effects of that policy are highly uncertain, however, because they would depend on how new residency slots were allocated among different specialties, which markets newly trained physicians chose to practice in, and whether those physicians joined existing practices with many other providers or established new practices.

Other proposals to increase the number of physicians would allow more trainees from other countries to stay in the United States after they completed their residency programs. For example, lawmakers could reauthorize or expand the Conrad 30 Waiver program, which lets each state identify a limited number of qualified noncitizen medical graduates to remain in the country after their residency, on the condition that they spend three years practicing in areas, or serving populations, that face a shortage of health care services.

The main purpose of policies to increase the number of physicians would be to address provider shortages and improve access to care in certain areas. Those policies could potentially reduce market concentration—and thus the prices paid to providers by commercial insurers—by increasing the entry of physicians into a market. At the same time, those policies might also increase the amount of services provided. If that effect outweighed the decrease in prices paid by commercial insurers, total spending for health care could increase. Indeed, any increase in the number of services paid for by Medicare and Medicaid would boost federal spending because there would be no offsetting savings from lower prices in those programs. Moreover, the federal government would incur the direct costs of funding additional residency slots. Given the uncertain effects on the prices and amount of services provided, CBO's cost estimates usually do not reflect changes in spending from changes in the number of physicians.

8. See Government Accountability Office, *Physician Workforce: Caps on Medicare-Funded Graduate Medical Education at Teaching Hospitals*, GAO-21-391 (May 21, 2021), www.gao.gov/products/gao-21-391. That cap was recently expanded by a small amount through legislation that allotted funding for an additional 1,000 Medicare-supported slots, to be disbursed over five years. See Centers for Medicare & Medicaid Services, "CMS Funding 1,000 New Residency Slots for Hospitals Serving Rural and Underserved Communities" (press release, December 17, 2021), https://tinyurl.com/e6t53jwd.

Appendix B: Policy Actions That Federal Agencies, States, and Employers Could Pursue

Only some of the policy approaches that would reduce commercial insurers' prices for hospitals' and physicians' services could be enacted through federal legislation. Other policies are within the purview of entities such as federal agencies, states, and employers. (Many of the federal legislative policies described in this report could also be pursued by states.)

Federal Agencies

Executive branch agencies could promote competition among health care providers in various ways. In particular, the Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DOJ) have considerable power to promote competition under the authority already granted to them by the Congress. For example, they could change their guidelines for mergers—which outline their interpretations of relevant federal antitrust laws—in a way that would expand the factors that trigger presumptions of competitive harm.[1] Such updates could signal to businesses the conditions under which proposed mergers are likely to be challenged, thus deterring some providers from consolidating.

The FTC and DOJ could also change their guidance to narrow the circumstances under which safe harbors (protections from the consequences for violating certain rules) would be granted to providers that negotiate jointly with insurers as clinically integrated networks. That change could reduce the likelihood that groups of providers would use their combined leverage to negotiate higher prices with insurers without increasing their efficiency in a way that benefited patients.[2]

Alternatively, those agencies could challenge more anticompetitive conduct by providers that have consolidated and attained substantial market power (as DOJ did, for example, in *U.S. and the State of North Carolina v. Carolinas Healthcare System*). Such actions might deter other providers with significant market power from employing similar tactics to thwart competition. In addition, the FTC or DOJ could pursue structural remedies, such as requiring merging entities to divest themselves of key lines of business or parts of their practice, as a precondition to merging. Those agencies could also widen the scope of the mergers they challenge by using novel economic and legal theories that have yet to be robustly argued in court. Doing so, however, could redirect resources away from cases that have a higher likelihood of being tried successfully.

States

Health care is highly regulated at the state level. Although states' laws and regulations may protect patients and improve the delivery of care, they may also raise the prices that commercial insurers pay providers by stymieing competition. States could promote competition among providers by eliminating laws that restrict the number of providers that can practice in a geographic area or that require them to have certain credentials to offer a particular type of service.

For example, some states have scope-of-practice laws that limit which services medical practitioners are allowed to provide and the degree to which they can work

1. In January 2022, the FTC and DOJ announced that they were seeking public comment on revisions to their merger guidelines. See Federal Trade Commission, "Federal Trade Commission and Justice Department Seek to Strengthen Enforcement Against Illegal Mergers" (press release, January 18, 2022), https://tinyurl.com/mrxuj7ch.

2. See Paul B. Ginsburg and L. Gregory Pawlson, "Seeking Lower Prices Where Providers Are Consolidated: An Examination of Market and Policy Strategies," *Health Affairs*, vol. 33, no. 6 (June 2014), pp. 1067–1075, https://doi.org/10.1377/hlthaff.2013.0810.

independently. Such laws can prevent harm to patients by barring practitioners from providing services that are beyond the scope of their training or expertise. But the laws can also protect dominant practices by limiting competition from nonphysician providers, such as nurse practitioners and physician assistants. Eliminating scope-of-practice laws would allow those nonphysician providers to offer more types of services, which would reduce prices, on average, if those providers commanded lower prices for the services than physicians do. The presence of additional competitors could also pressure physicians to reduce their prices.

States have other potential ways to reduce prices by promoting competition among providers, including the following:

- Eliminating or modifying certificate-of-need laws, which prohibit new providers (such as hospitals) from entering a market or existing providers from expanding their capacity in certain ways without explicit approval from the state;[3]
- Banning certificates of public advantage, which allow states to shield merging entities from federal antitrust oversight as long as the mergers achieve other regulatory objectives, such as preventing a rural hospital from closing;
- Repealing laws that reinforce providers' market power, such as "any willing provider" laws or freedom-of-choice laws, which limit insurers' ability to contract with only a subset of providers; and
- Creating pathways that make it easier for providers to practice in multiple states by adopting reciprocal licensure agreements and other models of mutual recognition.

Employers

Employers could reduce the prices paid to providers by offering plans with benefit designs that would increase enrollees' sensitivity to those prices and encourage price shopping. For instance, tiered-network plans assign providers to groups on the basis of the cost and quality of their care. In those plans, patients pay lower out-of-pocket costs if they obtain services from providers in more favorable tiers. That cost-sharing structure can reduce the average prices paid to providers for a plan's enrollees and can encourage other providers to reduce their prices (or improve their quality) in order to be placed in a more favorable tier. The value of such benefit designs would be more obvious to employers if the Congress pursued policies to promote price transparency, but many employers could offer those benefit designs under current law.

Other benefit designs that employers could offer under current law would use similar mechanisms to lower the prices paid to providers. Those mechanisms include reference pricing, in which enrollees pay any difference between their plan's benchmark price for a service and the provider's actual price, and reward programs, which pay patients for selecting lower-priced providers. Narrow network plans, which exclude many of the highest-priced providers from their networks, would create even stronger incentives for enrollees to receive care from lower-priced providers. Employers have favored those benefit designs far less than high-deductible health plans, but evidence suggests that such designs lead enrollees to choose lower-priced providers more frequently than high-deductible plans do.[4]

3. Conversely, certificate-of-need laws could increase states' ability to prevent dominant providers from extending their market position by expanding their capacity. One recent study found that states with such laws had more competitive markets for hospitals' inpatient services than states without those laws did; see Jomon A. Paul, Huan Ni, and Aniruddha Bagchi, "Does Certificate of Need Law Enhance Competition in Inpatient Care Market? An Empirical Analysis," *Health Economics, Policy, and Law*, vol. 14, no. 3 (July 2019), pp. 400–420, https://doi.org/10.1017/S1744133117000184. Another recent study found some evidence that certificate-of-need laws were associated with reductions in spending on hospitals' services but did not affect health care spending overall; see Christopher J. Conover and James Bailey, "Certificate of Need Laws: A Systematic Review and Cost-Effectiveness Analysis," *BMC Health Services Research*, vol. 20, no. 1 (August 2020), article 748, https://doi.org/10.1186/s12913-020-05563-1.

4. See Anna D. Sinaiko, Mary Beth Landrum, and Michael E. Chernew, "Enrollment in a Health Plan With a Tiered Provider Network Decreased Medical Spending by 5 Percent," *Health Affairs*, vol. 36, no. 5 (May 2017), pp. 870–875, https://doi.org/10.1377/hlthaff.2016.1087; James C. Robinson, Timothy T. Brown, and Christopher Whaley, "Reference Pricing Changes the 'Choice Architecture' of Health Care for Consumers," *Health Affairs*, vol. 36, no. 3 (March 2017), pp. 524–530, https://doi.org/10.1377/hlthaff.2016.1256; and Zarek C. Brot-Goldberg and others, "What Does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics," *Quarterly Journal of Economics*, vol. 132, no. 3 (August 2017), pp. 1261–1318, https://doi.org/10.1093/qje/qjx013.

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About This Document

This report was prepared at the request of the Chairman of the House Committee on the Budget. In keeping with the Congressional Budget Office's mandate to provide objective, impartial analysis, the report makes no recommendations.

Michael Cohen, Daria Pelech, and Karen Stockley wrote the report with guidance from Berna Demiralp and Chapin White. Elizabeth Bass, Alice Burns (formerly of CBO), Chad Chirico, Carrie H. Colla, Michael Falkenheim, Sebastien Gay, Tamara Hayford, Jared Maeda (formerly of CBO), Paul Masi, Sarah Masi, Alexandra Minicozzi, and Emily Vreeland offered comments. Robert Lindsay and Joshua Varcie fact-checked the report.

Comments on earlier drafts were also provided by Ge Bai of Johns Hopkins Carey Business School (a visiting scholar at CBO), Michael Chernew of Harvard Medical School, Leemore Dafny of Harvard Business School, Christopher Garmon of the University of Missouri–Kansas City, Martin Gaynor of Carnegie Mellon University, Robert Murray of Global Health Payment LLC, Chris Pope of the Manhattan Institute, and Christopher Whaley of the RAND Corporation. The assistance of external reviewers implies no responsibility for the final product; that responsibility rests solely with CBO.

Jeffrey Kling and Robert Sunshine reviewed the report. Christine Browne and Christian Howlett edited it, and Casey Labrack created the graphics and prepared the report for publication. The report is available at www.cbo.gov/publication/58222.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

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September 2022