Research Report

Increasing Price Transparency in Health Care

Key Themes and Policy Options from a Technical Expert Panel

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Preface

The health care system in the United States is much more expensive than in other high-income countries, but the greater spending does not result in higher quality or better health outcomes. Policymakers and health care stakeholders have been seeking ways to both reduce spending and improve quality. Price transparency is one strategy that policymakers have proposed to help consumers identify and select lower-priced health care providers and services. Significant variation in prices within a given market for health care services suggests that facilitating comparison shopping would reduce prices. However, it is often difficult for health care consumers and other stakeholders to know precisely how much a service costs, and therefore to compare the relative value of services across providers or settings. Websites to enhance price transparency have been created, but their uptake has been—and remains—low.

The Office of the Assistant Secretary for Planning and Evaluation (ASPE), which is part of the U.S. Department of Health and Human Services, commissioned the RAND Corporation to identify current price transparency efforts and their features, describe barriers to more widespread availability and use of price information, and investigate possible ways to overcome those barriers. RAND researchers conducted an environmental scan and convened a technical expert panel (TEP) to carry out this work. This report summarizes these efforts and the policy options discussed by the TEP.

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Summary

Spending on health care, both in terms of dollars and the rate of spending growth, continues to increase, despite repeated efforts to constrain spending. One proposed solution has focused on promoting the price transparency of health care so that consumers can shop for lower-priced health care services. Significant variation in prices within a given market for health care services suggests that it may be possible for consumers to put downward pressure on prices. Furthermore, the growth in high-deductible health plans is causing some consumers to be more exposed to the price of services. However, consumers currently find it difficult to find prices for health care services and compare them across providers before they seek care. Health insurers, states, and third-party organizations have developed price transparency websites to address these information gaps, but consumer use of these websites has been low.

The Office of the Assistant Secretary for Planning and Evaluation (ASPE), part of the U.S. Department of Health and Human Services (HHS), asked the RAND Corporation to identify current price transparency efforts and their features, describe barriers to more widespread availability and use of price information, and investigate possible ways to overcome those barriers. RAND researchers conducted an environmental scan to examine whether there are best practices in price transparency and convened a one-day technical expert panel (TEP), whose members had substantial, wide-ranging experience related to price transparency. Members of the TEP generated ideas on policy options to reduce barriers to more widespread use of price information, but the panel did not develop consensus recommendations.

Environmental Scan

For the environmental scan, we primarily searched for articles using terms related to price transparency in both scholarly search engines and Google in the past ten years. In addition, we collected related articles from the citations of publications and from the websites of organizations known to conduct research on or advocate for price transparency issues. Finally, we reviewed key price transparency websites targeted to consumers. Many stakeholders, other than consumers, can use health care price information, but much of the literature has been focused on websites targeted to consumers. Other stakeholders can both use and supply price transparency information—including employers, insurers, organizations that offer price or quality transparency websites, states, organizations running all-payer claims databases (APCDs), providers, and policymakers.

Current understanding of the impact of price transparency websites comes primarily from studies of consumer experience. Websites for consumers vary in both reach and detail. Some are available to anyone (public-facing); others are private (members-only), requiring a stakeholder,

such as an employer or insurer, to purchase access to the website on behalf of enrollees. Studies show that consumer use of both types of websites has been low. Several factors may underlie low use rates. Many services, such as emergency care, are difficult to evaluate in advance. Consumers may also exhibit a lack of price sensitivity because out-of-pocket payments do not necessarily reflect the price of the service—for example, if consumers pay a fixed copayment no matter what provider they choose. Furthermore, the available price information may be confusing or not actionable. For example, an average price for a service in a given geographic area does not help a consumer find the lowest-cost provider in the area. Finally, consumers may often value aspects of health care other than price, which may limit the usefulness of sites that focus only on price.

Other stakeholders also face barriers to accessing price information. Employers are "shoppers" of health care, because they purchase health benefits on behalf of employees, with far greater market share than individual consumers. Employers need information on insurer reimbursement rates for providers so that employers can compare prices and evaluate the negotiating ability of their insurer or third-party administrator.[1] Providers may want information on a patient's insurance benefit design and the relative prices of services when making treatment referral decisions, but this information is not generally available at the point of care. Federal and state governments need price information as they pursue ways to monitor prices and support policy development. Approximately 20 states have created or are in the process of creating an APCD to support this function, although states vary in the level of information collected and released to the public.

Providers and insurers also play a role as generators of price information, but they may be reluctant to share this information if they feel it would reduce their competitive advantage. Providers and insurers may use contract terms to limit the release of price information when developing network contracts. In addition, self-funded health insurance plans regulated under the Employee Retirement Income Security Act (ERISA) are generally exempt from state health care regulation, and states cannot require them to submit data to an APCD.

[1] A third-party administrator is an insurer or other organization that may administer a health plan for a self-insured employer.

Technical Expert Panel Meeting

With guidance from ASPE, RAND convened a TEP composed of price transparency stakeholders, providers, and researchers knowledgeable about price transparency issues. Three questions were posed to the TEP:

1. What are some successful initiatives promoting price transparency, and why are they successful?
2. What are barriers to their widespread use?
3. What actions could the federal government take to remove barriers and promote price transparency in health care markets?

The TEP challenged the underlying presumption that consumers alone can significantly reduce health care spending through comparison shopping using price transparency websites. TEP members expressed the view that consumers are the least powerful actors in the health care system and that encouraging them to actively shop for health care based on price, in order to reduce health care spending, is asking consumers to solve a problem that policymakers and other stakeholders have not been able to solve with the stronger tools at their disposal. The consensus of the TEP was that, while consumers may be able to save on out-of-pocket costs and potentially save their employer money on selected services, comparison shopping will not move the needle on health care spending overall. TEP members stated that consumers need price information before, during, and after receiving a service and discussed a variety of barriers and policy options to improve the experience of consumers.

TEP members went on to discuss examples of price transparency initiatives and barriers to using price transparency information faced by consumers and other stakeholders, including employers, providers, insurers, states, organizations that build price transparency websites, and policymakers. Members of the TEP stated that these other stakeholders also need better price information to achieve a variety of important public policy goals, including negotiating reasonable payment rates, reducing variation in payments across providers within markets, making sure that markets are competitive, populating price transparency websites, and monitoring the impact of policy and regulation.

The research team identified six key themes in the TEP discussion, as well as a number of potential policy options that were raised by one or more of the TEP members. Because this TEP was designed to generate ideas, we did not evaluate the feasibility of any policy options.

Theme 1: Consumers Are Not Often Shopping Before Receiving Services

When asked to identify successful initiatives in price transparency for consumers, TEP members who are involved in creating consumer transparency websites mentioned low consumer use. One member of the TEP disagreed and noted that the public-facing websites are used, particularly for discrete services, such as imaging, or services not covered by insurance. TEP

members explained that consumers need and use more than just price data when selecting providers.

In response, price transparency website developers, such as insurers or provider organizations, largely consider sites that just list providers ranked by price—"single-use" websites—unsuccessful. Instead, they are rebuilding these websites to provide additional decision supports for consumers (e.g., including information on where consumers are in meeting their yearly deductibles) and providers (e.g., the prices charged for a service by various potential referral providers) at multiple points of interaction with the health care system. Other wraparound supports might include call centers to help consumers make individualized decisions about where to seek care, rather than simply listing providers ranked by price on a website or in a phone application.

Theme 2: Price Information Is Difficult to Access During Services

Patients and providers may want to use price information when they are making treatment or referral decisions at the point of care. TEP members cited two key problems with the lack of interoperability of electronic health records (EHRs) as barriers to encouraging the use of price information in decisionmaking. First, it is difficult for EHRs to incorporate other data streams, such as claims, that would give providers and consumers an accurate idea of the consumer's out-of-pocket payments for various treatment options at the point of care. For example, it is difficult for a provider to check which prescription drugs are on a patient's formulary and assess which drug has the lowest cost sharing from within the exam room. The second problem with EHRs relates to referral patterns: Providers may be reluctant to refer patients to less costly providers outside of their own health care systems even if doing so is the lowest-cost option from a consumer's perspective. This is because diagnostic test results, notes from procedures, and/or specialist reports cannot be easily accessed via an interoperable EHR system.

TEP members suggested that increasing the interoperability of EHRs would make it easier for providers and patients to use price and other information at the point of care in their decisions on what treatment options to pursue. This includes both the ability to incorporate more information on the consumer's benefit design at the point of care and the ability to incorporate health records from external providers. While not a measure specific to increasing price transparency *per se*, increasing the full interoperability of EHR platforms and encouraging participation in regional health information exchanges would facilitate the transfer of information back to a referring provider regardless of its health system affiliation.

Theme 3: Price Transparency Information Can Be Misleading or Inaccurate

Prices are difficult to determine prior to receiving a service, which can result in a confusing set of charges after a consumer receives a service. Members of the TEP cited several reasons for this lack of clarity. The network status of a provider may be difficult to discern up front and can lead to surprise medical bills after the consumer receives the service. Services may comprise

multiple components, and bills for a single procedure (for example, a colonoscopy) can include both professional and facility fees, which can make it difficult for consumers to compare prices for the same set of services across providers. The use of facility fees is confusing and often come as a surprise to consumers.[2] Finally, medical bills and health plan EOB (Explanation of Benefits) forms cause additional confusion, because professional fees, facility fees, and charges for out-of-network providers are handled separately, such that consumers often receive multiple bills (and multiple EOBs) for the same procedure or visit. For these reasons, even if a consumer is able to use a price transparency website to comparison shop prior to receiving a service, the price information on a website may not fully reflect the costs the consumer is ultimately charged.

TEP members identified several possible policy options to address these issues. Some states have begun to pass legislation to protect consumers from surprise billing (often called "balance billing") by out-of-network providers. TEP members stated that HHS could encourage providers who are commonly out-of-network, such as emergency department physicians and anesthesiologists, to contract with insurers. Going further, TEP members said that HHS could work with Congress to harmonize state legislative efforts regarding balance billing by enacting federal legislation that would provide uniform protections for consumers in all states.

TEP members also suggested that HHS could lead the effort to eliminate incentives for providers to administer treatment in the more-expensive settings by adopting site-neutral payments within the Medicare program in order to eliminate consumer confusion over facility fees. This policy would put downward pressure on spending through shifting care to lower-cost settings, regardless of any improvements in transparency for consumers.

Finally**,** unclear EOBs make it difficult for consumers to see a clear link between the price quoted on a price transparency website and the bills they eventually receive. TEP members suggested that HHS could work with consumers and the public and private health sectors to develop formats for medical bills and EOB forms that are simple, standardized, and personalized (based on research evidence on information disclosure) and thus easier for consumers to understand.

Theme 4: Organizations Lack Common Definitions, Standards, and Methodologies for Sharing Price Data

Price transparency requires data to populate price transparency websites or other tools that may be used at the point of care or afterwards. TEP members pointed out that developing, sharing, and using price information is difficult, even for organizations with sophisticated data

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[2] A facility fee is an additional fee that an outpatient hospital department can charge relative to an independent physician's office.

systems. Variation in claims data systems across providers and insurers presents technical challenges, because data fields can mean different things and standardizing the data may be costly. There are no common standards for the definitions of information presented in price transparency websites. For example, an employer might want to know the cost of a colonoscopy across providers, but there is no standard set of services that comprise colonoscopy, nor is there an established metric for price (e.g., chargemaster amount or average negotiated amount).

TEP members suggested several ways to lower barriers to using price transparency information. For example, standard claims data layouts and definitions could be developed to facilitate the sharing of data. In addition, HHS could work with the private sector and consumers to develop a consistent definition for price that could be displayed in price transparency websites (e.g., negotiated amount, sticker price) and establish standard definitions for what components are part of a given procedure.

Theme 5: Increasing the Number of APCDs May Improve Stakeholder Access to Price Information

TEP members highlighted that state APCDs can provide price transparency information to consumers and to other stakeholders. APCDs can serve a critical role in informing policy development, monitoring the impacts of such policies, and assisting in regulatory oversight. However, not all states have an APCD, and states that do vary in their ability to promote price transparency through publicly available search websites. The state organizations also vary in their ability to conduct analyses that would support policymakers. TEP members suggested that HHS could provide financial assistance to help states start APCDs and/or provide ongoing technical assistance.

Theme 6: Legal and Regulatory Barriers Prevent the Sharing of Price Data

TEP members noted several legal and regulatory barriers that can prevent the public release of price information. Providers and payers often use contractual clauses, such as nondisclosure or "gag" clauses, or state that their negotiated rates and other price information constitute "trade secrets" so that they can avoid disclosure of price information to others. Not all insurers want to share price data with the public, particularly with state APCDs, and a recent Supreme Court decision allows self-funded employer health plans (a large share of the market) to opt out of the state APCD reporting requirements.

The legal barriers exist in a complex framework of case law and state and federal regulation. Many states have begun to pass legislation related to contract issues, and TEP members suggested that Congress could work to establish uniform rules related to these issues. TEP members also stated that HHS, in conjunction with several other agencies including the U.S. Department of Labor (DOL), and the Federal Trade Commission (FTC), could collaborate on issues surrounding trade law and ERISA to reduce barriers to information sharing.

Policy Options in Context

TEP members were asked, based on their experience, to generate a variety of policy ideas and options. They were not asked to develop consensus recommendations. The policy options generated by members of the TEP, and reflected in this summary of the TEP meeting, will need to be carefully specified—and given further consideration—prior to any move toward implementation. While implementation of some of these would likely result in increased availability of price information, there could also be other, wider impacts that go far beyond price transparency (for example, in the case of proposed changes to health care antitrust law or regulation).

In addition, the TEP discussed and highlighted instances in which improvements in price transparency, and a consumer's ability to comparison shop based on price, may be at odds with other policy goals or may be stymied by other trends in the health care industry. For example, recent federal policy efforts to improve health care quality have focused on increasing care coordination, but TEP members argued that too narrow a focus on price as the key decision factor could have the unintended consequence of disrupting the coordination of care for patients. Comparison shopping could push patients to pursue care from a random set of providers who are not connected to one another within an organized system of care and/or do not have access to patient information within an interoperable EHR. There are also situations in which it is unrealistic for a consumer to comparison shop on price, such as when the consumer is having a medical emergency.

With regard to trends in the health care industry, TEP members expressed concern that the newer, value-based payment innovations being promoted by the Centers for Medicare and Medicaid Services (CMS) and commercial payers could potentially make the problem of price transparency worse, because these payment arrangements are difficult to capture in unit-based price websites. For example, a provider group paid a capitated amount or receiving a care management fee to manage a particular population will be difficult to represent in a price search website. TEP members also cautioned that, although a particular health system may not offer the cheapest laboratory test, it may excel at managing a diabetic's entire cost of care and therefore be the better value option. Such differences are not currently reflected in unit-based price search websites.

Additionally, TEP members argued that, even if consumers are able to shop for care, the market concentration of providers in many geographic areas of the United States will limit the effectiveness of any price transparency strategy. It is not clear that price transparency websites alone will be sufficient to affect prices in markets with low competition.

Finally, much of what we know about the utilization and barriers to use of price transparency information come from initiatives aimed at those with commercial insurance (employer-sponsored or individual market). It is not clear how the barriers that TEP members identified or

the policy options discussed would translate to the Medicare or Medicaid programs where most beneficiaries can be protected from cost sharing.

Promoting price transparency in health care is a complex challenge that will require multiple stakeholders to address. TEP members provided many options for possible directions that state and federal governments could take, but each policy option will need to be weighed against the costs of implementation, feasibility, and any unintended consequences.

Acknowledgments

We would like to thank the members of the technical expert panel for their time and effort in clarifying the goals of price transparency and the actions that could assist with achieving those goals. We also acknowledge Sunita Desai and M. Susan Ridgely for their helpful comments on earlier drafts of this report. Lastly, we are grateful for the guidance and thoughtful feedback on the project that we received from Nancy DeLew, Christie Peters, and Daniel Crespin from the Office of the Assistant Secretary for Planning and Evaluation, which is part of the U.S. Department of Health and Human Services.

Abbreviations

APCD	all-payer claims database
ASPE	Office of the Assistant Secretary for Planning and Evaluation
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CMS	Centers for Medicare and Medicaid Services
DOL	U.S. Department of Labor
EHR	electronic health record
EOB	Explanation of Benefits
ERISA	Employee Retirement Income Security Act
FTC	Federal Trade Commission
HHS	U.S. Department of Health and Human Services
TEP	technical expert panel

Chapter 1. Introduction

Health care policymakers have been searching for solutions to lower health care spending and improve quality. One strategy for promoting better value has focused on providing information on health care prices to consumers before they select providers. Consumers typically do not know how much a service will cost until after they have received it, making it difficult to price shop. Significant price variation between providers in the same market, as well as evidence that prices are generally not strongly correlated with quality, suggests that increased comparison shopping could generate substantial savings without forgoing quality. Consumers may be motivated to shop in scenarios where they are footing more of the bill, such as when they have a high-deductible plan or face coinsurance, rather than copayments. For those who are motivated to price shop, unveiling price information could empower consumers to compare prices across providers, allowing them to make more price-conscious health care decisions. Ideally, they would compare prices across providers and choose lower-cost providers. Not only would this lead to immediate savings, but, over the long run, such price-shopping behavior would theoretically incentivize providers to compete on prices to attract consumers. By extension, some argue that price transparency is a vehicle to lowering health care costs overall.

Policymakers have been considering ways to advance price transparency to help consumers incorporate cost and quality into their health care choices. At the congressional level, Senator Bill Cassidy is leading a bipartisan group of senators developing health care price transparency legislation (Cassidy, 2018), and two Senate and House of Representatives hearings were recently held on this issue (McIntire, 2018; U.S. House of Representatives, Energy and Commerce Committee, 2018). At the federal level, U.S. Department of Health and Human Services (HHS) Secretary Alex Azar has been promoting greater price transparency for consumers as part of the agency's initiative to improve value in health care (Azar, 2018a, 2018b; HHS, undated).

Price transparency is not a new idea in health care: Health insurers, states, and other organizations have already built and promoted health care price transparency websites to consumers. The functionality of these websites varies significantly; however, even the best websites have seen little use by consumers—most studies find that 10 percent or fewer of consumers use a price comparison website when exposed to one (see, for example, Brown, 2018; Mehrotra et al., 2017; Desai et al., 2016).

The HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE), which advises Secretary Azar on policy issues, asked the RAND Corporation to examine best practices to promote health care price transparency and identify policy options for improving the use of price transparency information. To accomplish this, RAND researchers conducted an environmental scan of existing price transparency efforts, their impacts, and barriers to their use.

RAND also convened a one-day, in-person technical expert panel (TEP) to investigate options that would enable better website development and adoption.

Environmental Scan and Technical Expert Panel Preparation

We conducted an environmental scan of the peer-reviewed and grey literature to summarize what is known about price transparency initiatives for health care consumers. The review focused on the structure of these websites, evidence regarding their use, and barriers to use. We searched mainly for articles using terms related to price transparency in both the scholarly and grey literature in the past ten years. We focused on articles that examined empirically the effects of giving consumers access to price transparency information on outcomes of consumer utilization of the information, out-of-pocket spending, and total spending. We also included articles describing barriers to accessing and using price information for a variety of other actors. In addition, we collected related articles from the citations of key publications and from the websites of organizations active in promoting price transparency. We also reviewed illustrative price transparency websites, selected based on internet searches and previous reviews of these websites. We compiled information from the environmental scan into a background memo that we shared with the TEP members before the in-person TEP meeting. Chapter 2 of this report summarizes this information.

We and ASPE identified several topics as falling outside the scope of the environmental scan and scope for the TEP: (1) prescription drug price transparency, because that market has structural and regulatory factors that make it very different from markets for health care services; (2) websites that help consumers select health insurance plans, which is a different selection process from that of health care services; and (3) websites that display only quality information. Quality information is useful for all stakeholders; however, measuring and communicating quality information is different than communicating price information, and price is not always correlated with quality for health care. For these reasons, we focus solely on price transparency in this report.

In consultation with ASPE, we identified TEP candidates who represent a range of stakeholders, including consumer interest groups, providers, insurers, organizations developing price transparency websites, experts working with all-payer claims databases (APCDs), and academics who study price transparency websites and barriers to their use. We worked with ASPE to select 11 panelists, listed in Table 1.

Table 1. Technical Expert Panel Members

Name	Title and Organization
Will Bondurant	Senior Director, Castlight Health
Niall Brennan	President and CEO, Health Care Cost Institute
Jennifer Carmody	Director of Reimbursement and Health Policy, Billings Clinic
Robin Gelburd	President, FAIR Health
Craig Hankins[a]	Vice President of Digital Products, UnitedHealthcare
Kathy Hempstead	Senior Adviser to the Executive Vice President, Robert Wood Johnson Foundation
Jaime King	Associate Dean and Professor of Law, UC Hastings College of the Law; Executive Editor, The Source for Healthcare Price and Competition
Susan Knudson	Senior Vice President for Health Informatics, HealthPartners
Ateev Mehrotra	Associate Professor of Health Care Policy and Medicine, Harvard Medical School; Hospitalist, Beth Israel Deaconess Medical Center; Adjunct, RAND Corporation
Josephine Porter	Director, Institute for Health Policy and Practice, University of New Hampshire; Co-Chair, All-Payer Claims Database Council
Lynn Quincy	Director, Healthcare Value Hub, Altarum

[a] Craig Hankins has since left UnitedHealthcare.

The TEP meeting was held on June 18, 2018. Before the panel meeting, panelists participated in a short phone meeting in which the research team and ASPE provided an overview of the project, discussed logistical issues, and allowed time for the TEP members to ask any questions. Panelists were also asked to review the environmental scan information in preparation for the meeting.

Technical Expert Panel Meeting

The TEP meeting was designed to discuss three key questions:

1. What are some successful initiatives promoting price transparency, and why are they successful?
2. What are barriers to their widespread use?
3. What actions could the federal government take to remove barriers and promote price transparency in health care markets?

Cheryl Damberg from RAND moderated the discussion, with assistance from Christine Buttorff, also from RAND, and representatives from ASPE. In addition to the TEP members and staff from ASPE and RAND, representatives from the Centers for Medicare and Medicaid Services (CMS) and the U.S. Department of Labor (DOL) attended the session to hear expert experience and opinions that could be helpful to their transparency efforts. ASPE asked the TEP to consider consumers as the primary target audience for pricing information.

Chapter 2. Environmental Scan on Price Transparency for Health Care

Consumers shop for a variety of goods, incorporating both price and quality information to search for the best value. Shopping for services—for example, finding a plumber to fix a leaking pipe—is harder, because it requires more time to collect price estimates and evaluate the potential quality of the service. Shopping for health services is even more complex, not only because price quotes are difficult to obtain up front but also because quality can be difficult to assess. Even though consumers can play a role in comparison shopping for health care, they are not the sole "shopper" for health care services in the United States—other key stakeholders are involved. Price transparency can mean different things to different stakeholders, and, in turn, these stakeholders can require different types of information (Mehrotra, Schliefer, et al., 2018).

In this chapter, we summarize findings from the environmental scan phase of this project. We identify the stakeholders who have an interest in price transparency information, and we review how they might use such information. We also share information on the types of websites currently available and their benefits and limitations for consumers. A version of this chapter was shared with TEP members in advance of the TEP meeting.

What Does "Price" Mean in Health Care?

Prices in health care are complicated. We use the word *price* generically throughout the report (unless otherwise noted), but we acknowledge that the word actually represents several distinct concepts:

- *Chargemaster* (or standard) amounts are the so-called sticker prices that providers will charge for a given service. This is the amount that a consumer receiving no discount would pay.
- *Allowed* (or negotiated) amounts incorporate the discounts off of the chargemaster price that insurers negotiate on behalf of their enrollees. The negotiated or allowed amount includes the amount the insurer will pay beyond any cost sharing required of the consumer.
- *Benchmark* amounts would be a standard amount that is reasonable or "fair." There is no accepted benchmark in the United States, although there are several ways to derive a benchmark (such as using Medicare payment rates).
- *Out-of-pocket* amount is the deductible, copayment (flat fee), or coinsurance (percentage of the allowed amount) that a consumer will pay for the service. Sometimes this can include the chargemaster amount, if the service is delivered from an out-of-network provider.

To further complicate matters, a service can be composed of multiple components that may be priced separately. The total price for a colonoscopy, for example, may include the professional fee (physician), facility fee (the amount charged by a hospital or hospital outpatient department), and the cost of supplies. For an appendectomy, the standard set of services would include an initial visit, the surgery itself (including facility and professional components), and a follow-up visit. Each of these components can also have its own out-of-pocket amount.

Roles of Stakeholders in Price Transparency

Consumers have been the primary focus of many price transparency policy initiatives. These efforts have emphasized increasing the amount of price information available to consumers in the hopes that they comparison shop for lower-cost providers. Our environmental scan identified additional stakeholders who may be affected by or have interest in price transparency information, websites, or regulation. Some of these stakeholders play a role in releasing price information and benefit from the availability of price information. We describe each stakeholder group and how they might use price transparency information:

- **Consumers** would want to know how much services will cost and may want to shop for certain types of health care services, particularly if they are exposed to prices through high deductibles, for example. For those who are insured, the cost that they pay out-of-pocket depends on their insurance plan benefit design and whether the providers they use are in-network. Consumers would want to know their out-of-pocket amounts, which depend on these factors; however, out-of-pocket amounts are not always related to the price of a service. Once consumers have selected a physician, they may make a variety of decisions about subsequent health care services in conjunction with their physician. Consumers without insurance would want to know the average negotiated rate for a service, to help them negotiate a discount relative to the charge amount; they would also want information on whether the provider has any policies on charity care (discounts given to lower-income uninsured patients).
- **Providers** can refer consumers to lower-priced facilities or settings if providers can access price information at the time of ordering a diagnostic test (for example) or referring a patient to another provider, and providers might be more likely to do so if they have incentives to help patients seek out those lower prices. In theory, providers can also give consumers better guidance on treatment options if consumers are aware of the out-of-pocket cost implications of their decisions. Providers may be reluctant to report data on their own prices, if they believe that revealing their prices may put them at a competitive disadvantage.
- **Employers**, in conjunction with their chosen insurer (or third-party administrator), bear the responsibility for choosing the networks and negotiating the out-of-pocket amounts for the majority of services on behalf of their employees. As a result, when selecting provider networks and benefit designs to offer their employees, employers would prefer to have data on the negotiated prices insurers pay for services, as well as information on the quality and efficiency of different provider networks. Currently, employers often lack

access to this information, except for the premium that the insurer will charge them for the various network and benefit design options.

- **Insurers** use their claims information to populate price transparency websites for consumers, if the insurer operates a website. Insurers' claims information indicates the unit prices they pay to different providers and health systems. Insurers may also want price benchmarks to aid in price negotiations with providers within a health care market. However, information about the prices that insurers pay to providers is proprietary, and releasing this information could have anti-competitive effects.
- **Third-party organizations** (not associated with a health insurer) that offer price transparency websites have an interest in accessing data to build websites. Such third-party organizations include both for-profit vendors and nonprofit organizations that use claims data to build price transparency websites, which may be available for a fee or freely available to the public.
- **States that operate APCDs**, similar to the third-party organizations, may also build websites that serve a price transparency function, depending on the state. However, their main function is to aggregate claims information in the public interest, including for research purposes. States with APCDs request that all state insurers submit data, but they cannot compel all insurers to do so.[1]
- **Policymakers** (federal and state) set the "rules of the road" that shape the health care system. They may both consume price information and facilitate its release. Policymakers can use price transparency information to support policy development and monitoring functions. Policymakers need high-level information on trends and variation in prices and quality to adequately perform regulatory tasks such as enforcing rules on competition in the marketplace and addressing pricing and quality outliers and provider shortages (which could be caused by underpayments and/or providers refusing to accept insurance payments).

In the subsequent sections, we describe the current landscape of price transparency search websites, then summarize what is known about the availability and use of price transparency information by stakeholder groups.

Current Landscape of Price Transparency Websites

In our environmental scan, we identified several price transparency websites that are representative of efforts from third-party organizations and insurers. We profile several representative public-facing websites that are frequently mentioned as examples of price transparency websites. We distinguish between two types of websites: public-facing websites

[1] For this reason, APCDs are more aptly termed *multipayer claims databases*. However, because the common term used is *all-payer claims database*, we use the term *APCD* throughout this report.

and members-only websites. Public-facing websites are available to anyone. The audience for public-facing websites may go well beyond consumers, to include other stakeholders mentioned above. Members-only websites are available only to enrollees of an insurer or employees of a company.

Public-Facing Websites

Public-facing websites are available to everyone searching for health care prices. Importantly, these websites also educate consumers on insurance terms, price definitions, and other issues, such as what types of questions to ask a doctor before choosing a particular service or provider. Additional benefits are that the websites are free to use and that stakeholders other than consumers can use the information. We profile selected public-facing websites in Table 2.

Some of the public-facing websites are operated by third-party organizations; others by states that use data from their APCDs or other sources. States have begun passing laws to increase the amount of price information available to stakeholders, and APCDs are a key source of price transparency information, though they are not the only source (Sinaiko, Chien, and Rosenthal, 2015). In some states, hospital associations may also provide price transparency data using hospital discharge data (Kullgren, Duey, and Werner, 2013). Other state-level websites may use data from other state sources or national claims data sources. Typical health care services displayed on the websites include laboratory tests and diagnostic imaging. Other websites have more-extensive sets of services (including surgical procedures and dental care). Quality information presented on public-facing websites varies widely by site: Some sites develop their own composite measures from a variety of data sources; some use standard quality measures, such as the Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient experience measures; and others use patient ratings.

Table 2. Characteristics of Select Publicly Available Price Transparency Websites

Website Name and URL	Source of Price Data	Price Information Reported	Out-of-Pocket Cost Information	Quality Information[g]
National websites				
Clear Health Costs[a] (www.clearhealthcosts.com)	Medicare and crowdsourced prices[b]	Provider-level: chargemaster, allowed amounts	Consumer self-reported	No
FAIR Health[c] (www.fairhealth.org; www.fairhealthconsumer.org)	Claims data from 60 national and regional insurers	Area-level[d]: estimated in and out of network prices; consumers can toggle the estimates to reflect their insurance benefits	Estimated	Provides education and resources on where to find quality information
Guroo (www.guroo.com)	Health Care Cost Institute claims	Area-level: average allowed amount, will also show ranges	None	Area-level: Limited process measures; provides education and resources on where to find quality information
Healthcare Bluebook (www.healthcarebluebook.com)	Claims data (undisclosed sources)	"Fair Price" for the area,[e] providers are ranked above or below this amount	None	Provider-level: Patient ratings from healthgrades.com
State-level websites[f]				
California Healthcare Compare (www.cahealthcarecompare.org)	Truven Health Market Scan (2010–2014)	Area-level: 10th, 50th, and 90th percentiles of the distribution of allowed amounts	Estimated	Service-level: Composite measure
Center for Improving Value in Healthcare (www.civhc.org)	Claims data from Colorado ACPD	Median allowed amounts for selected services in selected hospitals	None	Hospital-level: Patient experience
Minnesota HealthScores (www.mnhealthscores.org)	Claims data and practice-reported data	Practice-level service amounts; average total cost of care for practices	None	Provider level: Composite measure
NH HealthCost (www.nhhealthcost.nh.gov)	Claims data from New Hampshire's ACPD	Median allowed amount by provider and insurer	None	Provider-level: Patient experience, some process measures

[a] Not all of the national sites have full geographic coverage: Clear Health Costs is crowdsourced in select markets while providing Medicare costs nationwide, and Healthcare Bluebook may not list provider-level information in all geographic areas for all services without a subscription.
[b] *Crowdsourced* means that anyone can upload their medical bill.
[c] FAIR Health also runs a specific site for the state of New York, which has provider-level information (youcanplanforthis.org) and a Spanish-language version. FAIR Health's pricing methodology allows consumers to estimate in and out-of-network costs.
[d] *Area-level* indicates that the website gives one price for a geographic area, such as Los Angeles, California.
[e] The "fair price" methodology is not disclosed on the website but is based off of negotiated amounts, rather than charge amounts.
[f] This is not a complete review of all state websites—we have highlighted selected databases. For more information on state efforts across the country, see the APCD Council website (www.apcdcouncil.org).
[g] The type of quality information varies by site, but several use quality data drawn from the suite of Compare sites operated by CMS, such as the CAHPS patient experience measures (see, for example, the Hospital Compare website at https://www.medicare.gov/hospitalcompare/search.html).

There are several downsides to the public-facing price transparency websites. The most important limitation is that they do not provide insurance-specific price information incorporating a consumer's exact benefit design. Out-of-pocket spending is thought to be the greater motivator for shopping, because it is what the consumer will actually pay (Ginsburg, 2007). Some websites, such as FAIR Health, can estimate out-of-pocket costs for a procedure and allow consumers to use a drop-down menu to modify the out-of-pocket estimates based on their benefit design. Despite this limitation, public-facing websites may be more useful for consumers who are searching for noncovered or out-of-network services. For example, one analysis of the FAIR Health website found that consumers do use the website to shop for discrete services, such as imaging, or services that may not be covered by insurance (Gelburd, 2018).

Another shortcoming of public-facing websites is that they often present price information averaged across insurers, providers, or both in a geographic area. Area-level cost estimates do little to equip consumers with information on the price of a service for a particular provider in a given area. These types of data may be more relevant to payers (who could compare this information with their negotiated rates) than consumers. Other sites, such as New Hampshire's NH Health Cost site, do present the median negotiated price for a service with a specific provider for a specific insurance type. However, even when prices for a specific provider are available, it can be difficult to make meaningful judgments about prices across provider types. For example, an academic medical center caring for complex patients may have higher costs per service than other local hospitals. The NH HealthCost website tries to indicate the certainty surrounding its price estimates and the possible differences in underlying health risk that might cause payments for one provider to be higher than another (NH HealthCost, 2017), but these types of caveats are not common on the websites.

Members-Only Websites

Third-party organizations and insurers have developed price websites that incorporate out-of-pocket cost information accounting for provider network status and the benefit design of the health plan (such as the deductible, copayments, or coinsurance), a key advantage over public-facing websites. The websites can also incorporate consumer spending to date, so that consumers can tell where they are in meeting their deductibles or out-of-pocket maximums. Since these websites are designed to be integrated into health plans, and they use claims and other information directly from the insurer, the websites are more likely to provide an accurate assessment of provider network status and out-of-pocket costs. The downside of these websites is that they are geared toward a smaller subset of stakeholders—employers and their employees. Finally, these websites are not free to the consumer—they require the employer to purchase access on behalf of their employees.

Most national insurers have some sort of price search website for employers to use with employee health plans (*Consumer Reports*, 2016; Higgins, Brainard, and Veselovskiy, 2016). Third-party organizations also are very active in producing price transparency websites, and

some of the most well-known of these websites include Amino (https://amino.com), Castlight (https://www.castlighthealth.com), and Compass (https://www.compassphs.com). Other sites, such as Healthcare Bluebook (https://healthcarebluebook.com) have a public-facing search website but also provide more-detailed information to employers who have purchased the website to work in conjunction with their health plans. A growing number of health systems and provider groups are also creating price transparency websites designed to work with local insurers to give price estimates for particular services (for example, Billings Clinic's My Cost Out-of-Pocket Price Estimator [https://www.billingsclinic.com/patients-visitors/price-estimator/]; HealthPartners' "Cost of Care at HealthPartners Clinics" webpage [https://www.healthpartners.com/hp/doctors-clinics/billing-financial/cost-of-health-care/index.html]; or Geisinger Health's myEstimate [https://www.geisinger.org/patient-care/patients-and-visitors/billing-and-insurance/myestimate]).

Given the login requirements for these members-only websites, we lack information on the differences across websites and therefore do not discuss these websites in any further detail. *Consumer Reports* had previously reviewed a sample of members-only websites operated by insurers, third-party organizations, and states (APCDs) and conducted in-depth interviews with consumers about using the websites (*Consumer Reports*, 2016). The authors found that consumers wanted accurate information on the cost of specific procedures and did not always trust the information they saw on the websites—even if provided by their own insurer. Consumers also wanted to integrate additional pieces of information, such as the network status of providers, whether in-network providers were accepting new patients, and quality measures, to appear alongside the price results.

Barriers to Using Price Information for Selected Stakeholders

We now focus on barriers to information use for key stakeholder groups identified in the literature. Some groups, such as the third-party organizations and insurers that have developed websites, were discussed in the previous section, and we do not discuss information use for those stakeholders further. As noted above, much of the policy focus has been placed on improving the ability of consumers to comparison shop for health care services. As a result, there is a larger body of literature for consumers than for the other stakeholders.

Consumers

Most of what is known about the utilization and impacts of consumer price websites comes from peer-reviewed studies analyzing the introduction of members-only websites in employer populations. Using health care claims data in conjunction with price transparency website search data, several studies have compared prices paid for services received by consumers who use the website (referred to as *searchers*) versus those who do not (referred to as *non-searchers*) within the same employer population (Sinaiko, Joynt, and Rosenthal, 2016; Sinaiko and Rosenthal,

2016; Whaley et al., 2014). For services for which patients often face substantial cost sharing, such as advanced imaging, some work has found evidence of modest price savings for searchers. For example, Whaley et al. (2014) found that searchers for imaging services visited providers with allowed amounts that were $125 (13 percent) lower than that for non-searchers. However, such savings were not uniform across services—savings for the searchers relative to the non-searchers were lower for laboratory visits ($3.45) and office visits ($1.18).

One limitation of these studies is that the authors compare searchers and non-searchers among a population offered access to a price transparency website, but patients who search may differ from those who do not in unobservable ways that are associated with spending. Moreover, these results do not account for the low share of patients in the population overall who use the website. If few patients conduct price searches, then savings among searchers may not translate to meaningful savings in health care spending overall, which is likely the more relevant outcome for insurers, employers, and other stakeholders. Two papers that have examined the impacts of offering a price transparency website on spending in the overall population offered the website have not found evidence of reductions in total health care spending (Desai et al., 2017; Desai et al., 2016). The lack of savings is likely due to low use rates of the website. Desai and colleagues (2016) found that only 10 percent of employees used a price transparency website when their employer made it available. Two studies of New Hampshire's price comparison site, developed using the state's APCD, found that between 1 and 8 percent of residents may use the website (Mehrotra, Brannen, and Sinaiko, 2014; Brown, 2018).

Potential Factors Contributing to Low Use of Price Transparency Websites

Feasibility of Shopping

For many health care services, shopping is not feasible. Emergency care, for example, cannot be shopped for in advance. Ginsburg (2007) details key characteristics of "shoppable" services. First, the care is simple (such as a diagnostic imaging test). Second, the care cannot be urgent or emergent. Third, the condition has already been diagnosed, and the consumer then knows the services for which to shop. Fourth, the service needs to be relatively discrete—there needs to be a clear service or set of services for which the consumer can seek a price. Lastly, the price needs to incorporate the consumer's actual out-of-pocket costs, which includes the network status of the provider and the consumer's deductible and other cost sharing.

Benefit Design Has Varying Impacts on Motivating Utilization

A problem in getting consumers to use price websites is that, in many cases, insurance benefit designs shield consumers from price differences, minimizing the incentive to use the websites. For example, if consumers are charged a flat $20 copayment per visit to all primary care providers, they may not have an incentive to search for lower-cost providers (Lieber, 2017). Consumers facing little financial consequence for their decisions may have no incentive to switch providers, even if the information on relative prices is available.

Pairing a price transparency website with financial incentives or other nudges to use the information might push insured consumers to use the websites. For example, consumers in high-deductible health plans or in coinsurance plans (in which they pay a percentage of the price of the service, rather than a fixed amount) may have more financial incentive to use price transparency information, because these consumers must pay several thousands of dollars out-of-pocket before their benefits apply. Early evidence in support of this theory is mixed; two early studies found no effects of being in a high-deductible health plan on use of the websites (Sinaiko, Mehrotra, and Sood, 2016; Brot-Goldberg et al., 2017). In contrast, Gourevitch et al. (2017) found that consumers with higher deductibles are more likely to use the websites (Gourevitch et al., 2017). For example, Sinaiko and Rosenthal (2016) found that the odds of using a price search website were 1.81 times higher for those in a high-deductible health plan than in plans with lower deductibles.

Pursuing a different approach, Safeway (a large national grocery store chain) paired price information on laboratory services with a reference pricing initiative. The employer (Safeway) set a maximum payment amount for each service (the reference price) and required employees to pay the difference if they wanted to receive the service from a more expensive vendor. Reference pricing requires that consumers have information on relative prices. The initiative lowered the average payment amount per laboratory service by 32 percent over three years (Robinson, Whaley, and Brown, 2016). Spending could have dropped because consumers selected lower-cost laboratories or because higher-priced providers lowered their prices to the reference price (or lower). In a separate study that examined a reference price for hip and knee replacements for another large employer, the authors found that the reference price did cause providers to lower their prices charged to plan enrollees—21 percent at low-priced providers and 34 percent at high priced providers (Robinson and Brown, 2013). More recent work finds that pairing price transparency with reference pricing is more effective than offering the price transparency website alone (Whaley, Brown, and Robinson, 2018).

While pairing price transparency websites with incentives such as reference pricing may work in the commercial sector, it is less clear that these types of financial incentives can be used in publicly insured plans such as Medicaid, in which beneficiaries are more protected from cost sharing. In addition, both Medicare and Medicaid set prices for services, so price shopping is not as relevant.

Other approaches to increase the use of the websites have included adding more wraparound services, such as patient education or outreach, to supplement the price information. While the impact of these wraparounds is less well documented, they have been shown to be more effective than passive interventions. For example, one insurer found that calling consumers scheduled to have an MRI to let them know about lower-cost providers resulted in those consumers shifting toward receiving the MRI in lower-cost settings (outpatient versus hospital settings) and an 18.7 percent drop in the average service cost (Wu et al., 2014). Under this experiment, the insurer made the new appointments for the consumers, lowering the costs associated with switching

providers. In addition, tiered networks, in which copayments differ based on provider tier, may provide additional signals about prices to patients, when paired with price-shopping websites (Prager, 2018). Tiered networks may send signals about prices or the relative quality of providers, even without a price-shopping website.

Price Information Display Can Be Confusing

Most policy attention on price transparency is focused on enabling consumers to comparison shop for services, although consumers may have other uses for price transparency information (Mehrotra, Chernew, and Sinaiko, 2018). For example, consumers often want to know the price prior to receiving a service or want to understand the charges on their medical bills after the fact. Consumers may also use price transparency information to gauge whether their providers have charged them a reasonable amount or to estimate where they are in meeting their deductibles or out-of-pocket maximums.

Very little attention has been paid to other ways consumers might want to use price transparency information or how the information could be made easier for them to understand. For example, price transparency websites present varying ways of measuring price. They may or may not break down component parts of procedures, such as a professional or physician fee, a facility fee, and an anesthesiology fee. Sites that do not explain or present the difference between the price for a set of services versus individual components may be inadvertently misleading consumers.

The way information is displayed can affect how consumers understand price information (Hibbard and Peters, 2003). Research on display formats for hospital report cards shows that consumers struggle to evaluate this complicated information (Emmert and Schlesinger, 2017). For example, Greene and Sacks (2018) found that describing a hospital as "affordable" rather than "low-cost" increased the number of consumers who chose the hospital, and that icons to display readmissions information were more effective than percentages at encouraging consumers to select higher quality hospitals. Earlier work on choosing health plans also shows that information display can influence consumer choices (Greene, Hibbard, and Sacks, 2016). Work from the economics and psychology literature recommends that information disclosures be simple, standardized, and personalized to the extent possible (Loewenstein, Sunstein, and Golman, 2014).

Consumers May Not Prioritize Price in Decisionmaking

A final barrier in the use of price transparency websites is that consumers may prioritize attributes of health care other than price, including relationships with their current providers. Ongoing relationships with current providers are valued in part because there can be costs associated with becoming a new patient at another office (Mehrotra et al., 2017; Semigran et al., 2017). Such costs can include not only time spent searching for a new provider but also delays in getting a new patient appointment, filling out paperwork, getting to know the new provider and

office, loss of historical knowledge of the patient, and perhaps new referral relationships. Tiered networks are one way to signal to patients about the relative cost or quality of providers. Previous studies investigating whether patients switch providers in a tiered network found that consumers tend to be very loyal to their providers, even when they may save money by shifting to a lower-cost provider (Sinaiko, 2016; Sinaiko and Rosenthal, 2014). Lastly, medically complex patients may wish to stay with current physicians for better care coordination.

Employers

Employers are a purchaser of health care services, with much larger market share than an individual consumer. Among the privately insured, the vast majority are enrolled in a plan offered by a current or former employer, or the employer of a family member. Employers choose which health insurance plans to offer, the scope of benefits and cost sharing, and the network of providers. Despite the fact that they play those key roles in the health care shopping process, extensive documentation of price variation for the same service across different providers suggests that employers do not wield their market power to negotiate lower prices (Cooper et al., 2015; Institute of Medicine of the National Academies, 2013; Dartmouth Atlas of Health Care, 2018). Recent work in Indiana shows that employers pay providers different amounts for the same service, indicating that information may not be available for employers to negotiate better prices (White, 2017). The key barriers may be the lack of information regarding the prices they pay and how this compares with what others are paying.

Ideally, employers would use price information to understand whether the rates they receive from their third-party administrator or benefit consultants are at, below, or above the rates being paid by other employers in their area. Employers typically rely on insurers, TPAs, or benefits consultants to negotiate prices with providers (Reinhardt, 2013; White et al., 2014). Fully insured employers do not generally have access to the claims of their employees, which would allow them to analyze the prices their TPA or insurer negotiated (White et al., 2014). Some contracts prevent self-insured employers from gaining access to their own data. Health insurers and privacy advocates have argued that giving employers access to identifiable health information on their employees could lead to wrongful terminations or other actions. This type of privacy concern stalled efforts of the federal government, one of the largest employers in the United States, to collect all of the claims data from carriers participating in the Federal Employee Health Benefits Program (Miles, 2010; U.S. Office of Personnel Management, 2016).

Some of the same issues in comparing prices for consumers, such as common bundles of services and clear definitions of price, are also barriers for employers in using this information. Benchmarks for reasonable or "fair" prices are also lacking. The closest thing to benchmark prices are the rates CMS sets for Medicare-covered services. CMS also releases public-use data files containing the average charges and allowed amounts for providers billing Medicare for specific services (such as a heart transplant) (CMS, 2017). These data can serve as benchmarks,

but they are not necessarily in digestible formats for employers to use to compare with the rates they receive in negotiations.

Providers

Efforts to improve price information for consumers have been largely unsuccessful in reducing spending. However, there is hope that providers could encourage use of lower-priced providers when they refer patients. For example, a recent study found that the referring provider was the most important determinant of treatment facility for advanced imaging in a large commercially insured population (Chernew et al., 2018). Therefore, giving providers price information about downstream providers to whom they refer (e.g., specialists, laboratories, imaging) and encouraging them to discuss issues related to costs with their patients could lead patients to visit lower-priced providers. Qualitative work found physicians would like to incorporate patient out-of-pocket information in their ordering decisions (Schiavoni et al., 2017; Ubel et al., 2016).

However, there are barriers to using price information at the point of care in the referral process. The first is simply changing ordering habits. Initiatives that aim to change provider ordering and prescribing behavior, such as the Choosing Wisely campaign, have not been very effective in reducing use of low-value services (Colla et al., 2015, 2016). Information that can be integrated into ordering systems may be more effective. One systematic review of early work in this area found that listing some type of cost information for a given service at the point where the physician orders the service can affect ordering and prescribing habits (Goetz et al., 2015). However, more recent work that randomized physicians to receive price information embedded in their electronic health record (EHR) ordering functions found no effect on ordering behavior (Chien et al., 2017; Sedrak et al., 2017; Sinaiko and Chien, 2017).

A second key barrier is that even if providers can incorporate price information into their ordering system, difficulties in transmitting information, such as sharing records with a specialist not in the same health system, could limit the effectiveness of including this type of price information in decisionmaking. Physicians could be less inclined to send consumers to lower-cost lab facilities if those facilities have difficulty transmitting information because of contractual issues. For example, most large health systems view any information, including laboratory results, as proprietary and therefore do not share information via EHRs (Holmgren, Patel, and Adler-Milstein, 2017).

In addition to their role in shaping referrals, providers have the role of providing information on their own prices, which they may oppose due to concerns over revenues. Several studies have shown that making price information more available has been associated with lower provider prices, as theory would predict. Providers have responded to some transparency initiatives by lowering prices (Brown, 2018; Robinson and Brown, 2013; Robinson, Brown, and Whaley, 2017), and state laws requiring hospitals to list charge prices have also resulted in lower charge prices, though not lower negotiated prices (Christensen, Floyd, and Maffett, 2013).

So-called "gag rules" in the contracts between providers and insurers limit the release of the negotiated rates, as do legal protections that allow negotiated prices to be kept "trade secrets" (King, Muir, and Alessi, 2013). Some academics and regulators have raised concerns that price transparency initiatives could cause lower-cost providers to demand higher rates from insurers (Sinaiko and Rosenthal, 2011; King, Muir, and Alessi, 2013). The Federal Trade Commission (FTC) recently raised such a concern about a Minnesota price transparency law (Lao, Feinstein and Lafontaine, 2015). The FTC's argument is that, if providers know what the other is charging for services, they may be less inclined to compete on price with each other (Koslov and Jex, 2015). The FTC has created a "safety zone" for data sharing that deems data sharing among competitors to be acceptable if a third party manages the sharing, if the data shared are older than three months, and if they are aggregated to a point where the individual competitors cannot be discerned (Bloom, 2014; U.S. Department of Justice and Federal Trade Commission, 1996).

Finally, even if providers want to disclose information on prices, it is often the case that providers cannot reliably provide a price on the front end. It is difficult to know before the service is performed which components will be used or whether patients will experience complications, both of which may result in additional costs. There are several papers in the price transparency literature in which authors attempt to determine the price of a service on the front end, and providers are rarely able to furnish this information. The number of providers able to give this information varied depending on the study and service. For example, 44 percent of hospitals could give a complete price for surgery (Racimo et al., 2018), nearly 80 percent of providers could price an imaging service (Paul et al., 2015), and 89 percent could price a primary care visit for uninsured patients (Saloner et al., 2017). The range in these studies demonstrate that more-complex services are harder to price on the front end. Further, prices may depend on whether specific providers are within a consumer's insurance network, which implants or devices are used for a given procedure, and the consumer's underlying health status (Farrell et al., 2010; Rosenthal, Lu, and Cram, 2013). Because most providers negotiate different rates with each insurer, providers may find it difficult to detail for a prospective consumer a service's price up front without knowing specifics of the consumer's insurance benefits (Saloner et al., 2017). Furthermore, even if providers were willing to ping claims systems to ascertain information on whether a service is in-network, claims systems cannot generally adjudicate claims in real time so that consumers can incorporate out-of-pocket information into their treatment decisions (Sinaiko and Chien, 2017).

State All-Payer Claims Databases

State APCDs can serve consumers, as well as other stakeholders, including employers, insurers, and policymakers. States such as New Hampshire, Minnesota, and Colorado have developed different types of price transparency information through APCDs (Center for Improving Value in Health Care, undated-b; Minnesota Health Scores, 2018; NH HealthCost, undated). For example, MN Community Measurement releases a measure of the total cost of care

for provider groups in Minnesota to illustrate variation in the average annualized cost of care for patients (MN Community Measurement, 2014; Nelson et al., 2017). Early research on the impacts of the NH HealthCost found that it did little to encourage comparison shopping among consumers because of the lack of competitiveness among providers in many areas, but that it did draw attention to the variations in prices employers were paying for the same service at the same provider (Tu and Lauer, 2009). More recent work found that among insured users looking for imaging services, 8 percent used the site (Brown, 2018).

Some state APCDs have been used to support policymaking or regulatory functions at the state level. One type of information they can provide is demonstrating that insurers have negotiated different prices for the same service with the same provider. For example, Colorado recently released a report describing payment variation in the state and comparing the payment rates against Medicare rates as a benchmark (Center for Improving Value in Healthcare, 2018). Another example is New Hampshire's Department of Insurance planning to use information in its APCD to examine network adequacy as part of the state's annual rate-setting process for insurers, which is the annual process for establishing premiums in some markets such as the individual market (Brooks, 2018). In addition to state databases, national multipayer claims databases, such as FAIR Health, have been used to support policymaking efforts such as developing recommendations on changing ambulance payment models and balance billing regulations for ambulance services in Florida (Florida Office of the Insurance Consumer Advocate, 2018).[2]

APCDs face multiple barriers to supplying price information, but the primary barrier is that not all states have them (de Brantes et al., 2017). As of summer 2018, approximately 20 states either have an APCD or are in the process of implementing one (APCD Council, 2018a). States that do have APCDs have varying capabilities to provide price transparency information to the public or perform analyses that would assist policymakers in their regulatory functions. Additionally, most APCDs are missing key market segments (Love, Custer, and Miller, 2010). Primarily, most state APCDs may be missing data from self-insured employers, following a 2016 Supreme Court decision in the case of *Gobeille vs. Liberty Mutual Insurance Company*. The Supreme Court ruled that self-insured employers subject to the requirements of the Employee Retirement Income Security Act (ERISA) cannot be required to submit their claims data to state-based APCDs, although some do so voluntarily. In its decision, the Supreme Court stated that DOL could act to resolve the issue: "ERISA's uniform rule design also makes clear that it is the

[2] "Balance billing" occurs when a provider bills a patient for any amount not covered by the patient's insurance. This can occur for both in- and out-of-network providers, depending on the insurance policy and state law. Balance billing is often the same thing as "surprise billing," which occurs when a patient receives a bill they did not expect because the provider was out-of-network.

Secretary of Labor, not the separate States, that is authorized to decide whether to exempt plans from ERISA reporting requirements or to require ERISA plans to report data such as that sought by Vermont [the state that brought the case]" (*Gobeille v. Liberty Mutual Insurance Company*, 2016).

Summary

In this chapter, we reviewed the stakeholders with roles in either using or releasing price transparency information. We also reviewed selected price transparency websites and discussed their strengths and weaknesses. Finally, we discussed barriers to using or releasing price transparency information.

There are multiple stakeholders who might use or play roles in releasing price transparency information beyond consumers, including providers, insurers, employers, third-party organizations, APCDs, providers, and state and federal policymakers. Publicly available price transparency websites allow consumers and other stakeholders to look up the cost of a particular service, although most are not able to provide information unique to the consumer's particular circumstances. Members-only websites are designed to work in conjunction with the consumer's insurance plan, and provide more specific information on provider network status and out-of-pocket costs. Finally, the literature search yielded multiple barriers for consumers in using price information, and highlighted a variety of barriers for other stakeholders in both releasing and using price information.

Chapter 3. Themes from the Technical Expert Panel Discussion

The RAND team asked the TEP to consider how to improve price transparency, with the goal of empowering consumers to comparison shop for lower-priced health care providers. We posed three questions to guide the discussion:

1. What are some successful initiatives promoting price transparency, and why are they successful?
2. What are barriers to their widespread use?
3. What actions could the federal government take to remove barriers and promote price transparency in health care markets?

TEP members unanimously raised concerns about the potential for price transparency websites to adequately assist consumers in comparison shopping in a way that would reduce health care spending at the market level. Although increased price transparency may lead to savings for specific services, there are a variety of structural barriers that limit the impact of this shopping on overall health care spending. TEP members explained that consumers cannot bear the full responsibility for gathering, processing, and acting on price information. That responsibility should be shared with other stakeholders, including health insurers, employers, providers, and state and federal policymakers. TEP members cautioned that health care is a very different service from other consumer services; it is complex and uncertain. For example, a provider may not know the full extent of services associated with a surgery until after completing the operation. TEP members identified many barriers to using price transparency information for other stakeholders in the system and suggested that addressing these additional barriers would also hold downstream benefits for consumers.

In this chapter, we discuss major themes derived from responses of the TEP members to our questions. TEP members were asked to generate a variety of policy ideas based on their expertise. The ideas of TEP members will need to be assessed in terms of the stakeholders who will be needed to design and implement the policy idea, the feasibility of implementation, and whether the policy would achieve its desired goal.

Themes

Six major themes emerged from the TEP's discussion: (1) Consumers are not often shopping prior to receiving services; (2) price information is difficult to access during services; (3) price transparency information can be misleading or inaccurate; (4) organizations lack common definitions and standards for sharing, measuring, and reporting price data; (5) increasing the number of APCDs may improve stakeholder access to price information; and (6) legal and regulatory barriers prevent the sharing of price data. When appropriate, we also mention policy

options that members suggested for how to address the barriers to price transparency that they identified. Members of the TEP were not asked to provide consensus recommendations on policies to pursue. The policy options are summarized in Table 3.

Table 3. Summary of Policy Options

Theme	Option
Consumers Are Not Often Shopping Before Receiving Services	Price transparency efforts may need to include information other than price, such as quality and provider availability, and supply this information at multiple decision points for consumers.
Price Information Is Difficult to Access During Services	Improve interoperability of EHRs to increase the amount of information available to patients and providers in making treatment decisions and incorporating medical records from other providers.
Price Transparency Information Can Be Misleading or Inaccurate	Encourage providers that are commonly out-of-network to contract with insurers to ensure fewer surprise medical bills. Develop federal legislation regarding balance billing. Adopt site-neutral payments in the Medicare program to eliminate consumer confusion over facility fees. Develop standardized, simplified medical bills and explanation of benefits forms.
Organizations Lack Common Definitions, Standards, and Methodologies for Sharing Price Data	Develop a definition for what price information should be displayed by providers and on price transparency websites. Develop common data layouts for reporting claims data for use in price transparency activities. Develop sets of shoppable services to make comparisons across providers easier for consumers and employers.
Increasing the Number of APCDs May Improve Stakeholder Access to Price Information	Provide seed funds and ongoing technical assistance for state APCDs.
Legal and Regulatory Barriers Prevent the Sharing of Price Data	Work with DOL to resolve barriers to APCD claims submissions. Address contractual issues such as ‘gag clauses’ or what constitutes a trade secret at the federal level. Revisit ERISA statutes to allow for more state flexibility in including self-insured plans in APCDs or other reform efforts. Work with FTC to resolve barriers to data sharing.

NOTES: EHR = electronic health record. APCD = all-payer claims database. DOL = Department of Labor. ERISA = Employee Retirement Income Security Act. FTC = Federal Trade Commission.

Theme 1: Consumers Are Not Often Shopping Before Receiving Services

The first research question posed to TEP members regarding the successful initiatives in price transparency elicited a discussion on the challenges of promoting the use of the websites among consumers. TEP members indicated that price information communicated to consumers is overly complex and not particularly useful. Some TEP members cautioned that basic health

literacy is still a problem for some consumers regarding insurance terms such as deductible, copayment, or coinsurance.

Consumers need information other than price. Several TEP members with experience developing consumer transparency websites cited low use of the websites and limited utility of the information when provided outside of doctor-patient interactions. This view was not unanimous—one member said that the public-facing websites are useful for consumers by providing cost estimates for noncovered services, for example. TEP members agreed that consumers are concerned about whether the health care they receive is safe, and that price is only one dimension of the decisionmaking process surrounding health care. TEP members pointed out that consumers are not clamoring for more price information; rather, they want a less frustrating experience with the health care system. Finally, several TEP members explained that there may be certain consumers who are able to shop for services but find comparison shopping stressful, limiting their ability to shop. This may be particularly so for those who are very sick.

For these reasons, the TEP members developing consumer websites (insurers, website developers, and provider organizations) stressed that they have moved beyond showing price information alone. They argued that consumers really want guidance on decisionmaking. Developers are redesigning consumer websites to provide wraparound decision supports that integrate benefit design information into the websites and provide more patient education.

Theme 2: Price Information Is Difficult to Access During Services

Furthermore, TEP members indicated that, although consumers can shop for some services ahead of time, most of the decisions regarding health care services happen while in a doctor's office. TEP members remarked that providers are trusted sources of information and that providers influence decisions about subsequent care more than a consumer simply viewing a list of the relative prices of services. As a result, TEP members are trying to get price and other information, such as quality or outcomes of various services, to providers and patients at the point of care.

The lack of interoperable EHRs remains a barrier. Members of the TEP flagged problems with sharing information across EHRs as a key barrier in promoting price transparency for consumers at the point of care. If a provider and consumer do not have information on the relative cost of providers for referrals, such as a specialist for a follow-up visit, there is a missed opportunity to promote the use of lower-cost providers. Ideally, the EHRs would include real-time claims information, so that, for example, providers and consumers can assess the most appropriate course of treatment given their insurance benefit design and the amount the consumer has currently paid toward the deductible. Additionally, better interoperability across providers could give patients more choice about where to seek a diagnostic imaging service or laboratory test if the results could easily be transmitted back to their provider.

TEP members noted that HHS could work with providers and EHR vendors to increase the interoperability of EHRs and other patient data enabling informed point-of-care decisions about

procedure and referral options. Promoting the interoperability of EHRs is not a policy option that is specific to promoting price transparency and addressing interoperability would take additional stakeholders such as EHR vendors. HHS is currently in the process of promoting the interoperability of EHRs across providers in an effort unrelated to price transparency (HHS, 2018).

Theme 3: Price Transparency Information Can Be Misleading or Inaccurate

TEP members identified several problems that that lead to confusing or opaque information regarding the costs of services. These issues affect all consumers—not just those who may try to comparison shop prior to receiving a service.

Out-of-network bills can surprise even careful consumers. Even if a consumer tries to shop ahead of time for a low-cost, in-network provider, consumers may experience emergencies resulting in out-of-network care, or they may go to an in-network facility and find out after the fact that the professional services were provided out-of-network. For example, an out-of-network anesthesiologist may have been present at an outpatient surgery; a recent study found that nearly one in five inpatient services in a population of commercially insured individuals resulted in an out-of-network claim (Claxton et al., 2018). TEP members unanimously noted that the lack of accurate and complete information on provider networks is a key frustration for consumers. TEP members also added that lists of in-network providers are only helpful if there is some indication of whether those providers are taking new patients.

Several TEP members stated that HHS could encourage providers who are commonly out-of-network, such as emergency department physicians and anesthesiologists, to contract with insurers or consent to bundling with other services, such as labor and delivery. Some states have begun to enact legislation to protect consumers against balance billing and usually focus on emergency care, though these provisions do not apply across all insurance types or states (Lucia, Hoadley, and Williams, 2017). As a result, TEP members also stated that HHS could work with Congress to tackle out-of-network billing by enacting federal legislation to set uniform protections for consumers across states regarding balance billing and notification of patients regarding provider network participation.

Facility fees confuse and frustrate consumers. TEP members noted that facility fees are also a source of confusion and frustration for consumers. Consumers may not realize they are receiving care in a hospital outpatient facility versus a doctor's office, and, therefore, this after-the-fact bill creates additional confusion.

TEP members argued that HHS could adopt site-neutral payments within the Medicare program to eliminate facility fees altogether. Medicare's large influence in the marketplace could lead commercial insurers to adopt similar site-neutral payment policies. While this particular policy option was mentioned in the context of reducing consumer confusion, the policy would put strong downward pressure on prices and would also potentially shift care from higher-cost to lower-cost settings (e.g., hospital outpatient to physician office). CMS has begun to address the

facility fee issue for clinic visits in a request for information issued as part of the proposed Outpatient Prospective Payment System annual rulemaking process (*Federal Register*, 2018a).

Medical bills do not necessarily reveal how much a service costs. Several TEP members flagged that the lack of a standardized, clear medical bill or EOB form can make it difficult to determine how much a service actually costs. Consumers may receive multiple bills for the same services because of the issues noted above (such as facility fees and out-of-network providers), making it more difficult to understand the full cost for an episode of care.

TEP members pointed out that it would be easier for consumers to know how much they are being charged for an episode of care if consumers and the public and private sectors worked with HHS to develop standardized formats for EOB and billing forms that include lay person-oriented definitions and eliminated extraneous information.

Theme 4: Organizations Lack Common Definitions, Standards, and Methodologies for Sharing Price Data

Members of the TEP raised a variety of issues with data sharing that make more widespread use of price information challenging.

Lack of standard layouts make data sharing difficult. TEP members stated that the lack of common definitions, standards, and methods for collecting data and calculating metrics increases costs for organizations and businesses attempting to provide more transparency to consumers. Claims data fields may mean different things for different organizations, and several TEP members noted that standardizing this information takes a substantial amount of resources. Smaller providers or vendors may have fewer resources with which to make this information usable.

TEP members observed that HHS could work with states and the private sector to develop standard claims data layouts and definitions for reported fields in order to facilitate data sharing for insurers, claims aggregators, and developers of price transparency websites. This process would not only benefit consumers, in terms of consistent information being relayed across the health care system, but it would also decrease the costs for businesses associated with transmitting information. As will be discussed below, there is a precedent for developing common data layouts that has been occurring with the APCDs.

Definitions are not consistent. In addition, the metrics presented to consumers are not consistent—for example, should the consumer be shown a chargemaster price, an average negotiated amount, or an out-of-pocket cost? TEP members argued that setting up a suite of definitions so that every site was reporting the same information would make comparisons easier. This may be a challenge if sites have varying levels of access to information—for example, Clear Health Costs is reliant on consumer-reported data and would not have access to the same level of detail as a site developing price comparisons from claims data. TEP members stated that, for consumers, the most useful and salient information is their out-of-pocket costs,

incorporating their insurance benefit design and provider network information and not all sites have access to this information either.

TEP members stated that HHS could work with stakeholder groups to develop a consistent definition of price for display on transparency websites, such as the average negotiated price. In fact, CMS has already been formulating policies along these lines. As part of the recently finalized Inpatient Prospective Payment Rule, CMS updated its guidance related to the requirement that hospitals list "standard charges (whether that be the chargemaster itself or in another form of their choice)" and sought public comment on the definition of "standard charges." In the short term, this requirement may allow for continued variation in what type of information may be presented (*Federal Register*, 2018b; CMS, 2018). CMS indicated that it will continue to refine these requirements in the future.

Comparing prices is challenging. As part of the discussion on defining the components of price, TEP members observed that consumers and other stakeholders cannot easily compare prices across providers for the same service, because a service may contain multiple components that are billed and paid separately and the components may vary from hospital to hospital. Consumers and other stakeholders need to be able to compare the same service or set of services across providers.

TEP members said that HHS could develop standardized sets of services that make up a single service from the consumer's point of view. Defining these sets of services would promote comparability of services and prices across providers and make it easier for consumers to compare prices. Definitions could align with sets of services created under "bundled" payment approaches, which go a step further to actually create a single payment for a set of services.

TEP members also indicated that the metrics created to signal value could go beyond the price of individual, discrete services. One suggestion was to establish a "total cost of care," similar to that being used in Minnesota (MN Community Measurement, 2014). A total cost of care metric that is risk adjusted to account for underlying difference in the patient populations could provide a more comprehensive picture of the relative efficiency of provider groups and could incorporate value-based payments, such as care management fees or quality bonuses. A certain provider group may have higher prices for a particular service but lower total costs when one considers managing the overall care for, for example, patients with chronic disease. Other members of the TEP stated that the difficulty with these types of comprehensive metrics is that the health status among the underlying populations can be different across provider groups, which leads to different utilization levels and thus different spending levels. As an alternative, one TEP member suggested creating a "market basket" of health care services and having each provider group list its prices for those services. This would avoid the risk-adjustment process.

Theme 5: Increasing the Number of APCDs May Improve Stakeholder Access to Price Information

TEP members observed that even if consumers have limited use for price transparency information, there is value to releasing price information for other stakeholder groups. For example, several TEP members said that the price transparency information can serve a "naming and shaming" function for both providers and payers to highlight outlier payment rates that are well above average in an area. TEP members thought that increasing the use of APCDs was a primary way that this type of price information could be made more widely available.

TEP members also argued that APCDs could serve additional monitoring and tracking functions for state policymakers beyond exposing price variation, such as examining the effects of state health care policies, assessing impacts of mergers among health care entities, and payer rate setting. APCDs can allow policymakers, researchers, and others to examine how consolidation in health markets is affecting prices or insurance premiums, for example.

Access to APCDs is not uniform. Some state governments, using their APCDs, have begun to show the extensive variation in payment and quality across provider groups, as noted in Chapter 2. APCDs may be particularly useful for employers in understanding how their insurer's negotiated payment rates compare with others. TEP members noted that access to APCDs is not uniform across states and that not all states currently have the technical expertise or funding to conduct robust data analyses that would support policy development at the state level. Furthermore, it is difficult to get claims from all payers into a database, particularly self-insured employers.

Some TEP members also suggested that the state APCDs could feed into a national APCD that would facilitate research and regulatory oversight of health care markets. The federal government could manage its own APCD, similar to the way it manages claims for Medicare. However, other TEP members cautioned that there are existing organizations that are already building national multipayer claims databases (such as FAIR Health, the Health Care Cost Institute [HCCI], and the variety of other proprietary claims data aggregators, such as IQVIA and Truven Health). Most of these databases require fees to use the data, but many also have some data available for free, such as through the price search websites available to the public.

TEP members presented several options to promote APCDs. HHS could provide seed funds to states that would like to start an APCD. Funds for ongoing technical assistance on database operation and management, as well as data analysis, could also be provided. Standardized claims data layouts, mentioned above, could facilitate the APCD process by making it less costly and burdensome to compile and use claims information from multiple payers.

Theme 6: Legal and Regulatory Barriers Prevent the Sharing of Data

While many of the policy options discussed in the previous themes can be addressed within current legal frameworks, others cannot. Primarily, turning the current multipayer databases into

truly *all*-payer databases will require regulatory changes, and members of the TEP also discussed other changes to contract language between providers and insurers that could be pursued.

Self-insured health plans are exempt from state insurance regulations. Some TEP members raised concerns that the Supreme Court's interpretation of the ERISA statute in *Gobeille vs. Liberty Mutual Insurance Company* significantly constrains the ability of state APCDs to provide an accurate and complete picture of health care prices needed to inform consumer and provider treatment decisions, as well as policymaker attempts to understand and control health care prices.

As noted in Chapter 2, one policy action could be for DOL to require ERISA plans to report claims data to state APCDs, using common data layouts to reduce the burden of reporting across states, although TEP members noted that there is some uncertainty on whether DOL has the authority to make this change, even with the Supreme Court ruling. In 2016, DOL went through a rule-making process to change current reporting forms to collect additional data from ERISA plans, known as Schedule J and Form 5500 (DOL, 2016). The APCD Council, the National Association of Health Data Officials, and the National Academy for State Health Policy went through a process of creating a common data layout to reduce the reporting burden for plans, and urged DOL to require that ERISA plans submit data as part of DOL's comment period (National Academy for State Health Policy, 2016; APCD Council, 2018b). At the end of the comment period, DOL made some changes to the forms but did not go as far as requiring claims data to be submitted. Developing the common data layout for claims submissions was also one of the suggested policy actions mentioned under Theme 2.

One TEP member argued that Congress could amend the ERISA statute to permit states to apply for waivers from ERISA preemption, when the proposed waiver balances the importance of the public's interest and ERISA's goal of uniformity for employers. For instance, granting states a waiver to enable them to require claims data reporting to state APCDs in a common data layout would promote both ERISA's uniformity goals and the public interest in lowering health care costs. Congress could go one step further by amending ERISA's preemptive authority from a broad authority that preempts any state law related to an employee benefit plan to a narrower conflict-preemption authority that only preempts state laws that directly conflict with ERISA. This change would enable states to address health care costs and promote price transparency much more directly.

Contractual language may prevent disclosure of prices between providers and payers. In addition to the specific case surrounding APCDs, TEP members argued that the continued opaqueness surrounding prices for health care is partly due to contracts and legal arrangements, and that both providers and insurers may have an interest in maintaining secrecy around prices. Problematic contract language includes nondisclosure (or "gag") clauses that prohibit providers and insurers from disclosing or publicly listing their negotiated prices. Anti-tiering and anti-steering clauses, which prohibit insurers from signaling to patients which providers are high-value and providing incentives for patients to select them, are also problematic. These kinds of

clauses can also prohibit certain kinds of physician referrals. Even in the absence of nondisclosure clauses, providers and payers may claim that their negotiated rates constitute "trade secrets" protected under state and federal trade secrets laws, which often enables them to refuse to disclose the information unless an entity is willing to challenge this designation in court.

Laws addressing contractual clauses vary by state, and states in recent years have begun to pass laws banning the use of these contractual terms that pose barriers to price transparency. For example, lawmakers in California introduced a bill in 2018 to ban gag clauses in contracts between providers and insurers, and approximately half of states have passed laws since 2016 banning the use of gag clauses between pharmacists and pharmacy benefit managers (Cauchi, 2018).

Congress could draft legislation to bar the use of gag and similar clauses in contracts between insurers and providers in order to harmonize these policies across states, as Congress has recently approved doing for pharmacy gag clauses (U.S. Senate, 2018). Policymakers could clarify whether and under what circumstances negotiated health care pricing data can constitute a trade secret, and also create a "public interest exemption" to trade secret protections, such that trade secret protection can be revoked if used against the public interest. Finally, HHS could work with the FTC to revisit the "safety zone" for the release of payment data, such that data are released only under specific circumstances. Current standards prohibit data release in a large percentage of markets.

Policy Ideas in Context

While the TEP members highlighted a number of possible policy options, the TEP members discussed several areas in which comparison shopping potentially conflicts with other policy goals. TEP members also discussed a variety of trends within health care markets that may limit the effectiveness of any increases in price transparency. For these reasons, each policy option would have to be evaluated on its feasibility, potential impacts, and unintended consequences.

Conflicts with Other Policy Goals

Disrupting Care Coordination

Recent policy efforts have focused on increasing care coordination, particularly for complex patients, by having patients receive care from a group of clinicians who work as a team within a system of care. Providers are increasingly encouraged to manage the health care of a patient panel across the full scope of patient experiences with the delivery system.

While patients who encounter the system infrequently might be convinced to shop for certain services, for some complex patients, the health benefits of having continuous care in one system may outweigh the benefits of switching providers by constantly looking for lower-priced, higher-value care. Efforts to redirect patients to other providers who are "high-value" but outside their

usual system of care may reduce coordination of care, particularly if the different providers do not share information systems that can seamlessly transmit information across providers in different health systems.

Compatibility with Value-Based Payment Models

TEP members raised the point that price shopping can undermine the policy push toward value-based payment modes. These models financially reward high-quality providers and penalize low-quality providers through higher or lower reimbursement rates. Under these policies, providers are charged with lowering a patient's total cost of care. Comparison shopping, or constantly switching providers can reduce the ability of provider groups to manage the overall cost of care for a particular patient. Furthermore, comparison shopping websites can cause difficulties for other stakeholders in determining the relative efficiency of various provider groups in caring for populations. The state of Maryland is currently facing this problem, as it recently launched a price shopping website but uses a value-based payment system for hospitals. Some have argued that because the more efficient hospitals are paid more, the price shopping website sends misleading signals to patients about the relative prices and quality of care across hospitals in the price comparison website (Herring, 2018).

Unit-based price tools may also have difficulty incorporating various value-based payments, such as a care management fee. This potential barrier could be addressed as part of the process of defining the components that are included in the price of a specific service, but methods would have to be developed to allocate value-based payments across unit prices.

Ramifications of Addressing Legal Barriers

The goals of price transparency need to be weighed against other concerns such as protecting consumer privacy or supporting a competitive marketplace. Many of these legal protections may be at odds with expanded availability of price information, particularly related to anti-competitive practices. Any changes to anti-trust or other law would have implications beyond the health care system and these impacts would need to be evaluated carefully for their impact on other industries.

Reasons the Impact of the Policy Options May Be Limited

Impacts on Spending

Price shopping might lower spending through several mechanisms, and TEP members raised issues with some of them. First, price transparency might lower spending by causing consumers to switch to lower-priced providers. However, if a consumer's benefit design charges the same copayment for all primary care providers, it is not clear that a price comparison website would produce sufficient incentive to convince consumers to switch. Second, price transparency might lower spending by motivating high-priced providers to lower their prices. This was the intended result of several initiatives that paired price transparency websites with consumer incentives to

use them, as noted in Chapter 2. However, members of the TEP argued that lower-priced providers could always raise their prices as well.

Some of the largest effects on spending may actually come from addressing the underlying problems that contribute to opaque or confusing information: surprise bills and facility fees. Surprise medical bills are very frustrating for consumers, but solutions would have to be designed carefully. Insurers may use the threat of excluding provider groups from their network in negotiations, and many insurers now also offer narrow network plans for a lower premium. Preventing insurers from using narrow networks could raise spending. Eliminating facility fees would level the playing field between physician offices and hospital outpatient departments, and encourage consumers to seek care in lower-cost settings. However, hospitals argue that these payments support a variety of other costly, complex services delivered in hospitals, so the ramifications of moving to site-neutral payments would need to be evaluated.

Market Concentration of Providers

The concentration of providers, as exists in many markets, will limit the impact of price transparency. TEP members noted that many provider health care markets in the United States are heavily concentrated; members cautioned that releasing provider price information may have little effect in these markets. As noted above, APCDs could allow providers to know whether their prices are above or below competitors (or at least a local average) and adjust their prices accordingly. Lower-priced providers may see the rates charged by providers with higher market power and use them to justify increasing their prices to just slightly below those rates. The risk of this type of pricing behavior is greatest in less competitive provider markets.

One TEP member argued that different approaches to reducing the impacts of provider consolidation may be needed depending on the geographic area. For example, rural areas may be getting more concentrated because of efforts to maintain access to care for remote populations. Larger systems may need to take over financially ailing smaller ones in order to ensure access. Addressing larger competition issues will take a multifaceted approach with multiple federal agencies.

Applicability to Other Markets

CMS and the state Medicaid programs set prices for their fee-for-service enrollees, or allow private companies to negotiate these prices for beneficiaries in managed care plans, such as Medicare Advantage. Enrollees of both programs are often protected from cost sharing for a variety of reasons. Medicaid enrollees are generally protected from cost sharing due to their incomes. While some states have nominal copayments, Medicaid enrollees generally face very little cost sharing. Original Medicare does have fairly substantial cost sharing, such as 20 percent coinsurance on office visits, but most Medicare beneficiaries have some type of supplemental coverage, such as employer, Medigap, Veterans Health Administration, or Medicaid coverage, that protects them from some or all cost sharing—2010 data show that only 14 percent of

Medicare beneficiaries have no other source of coverage than original Medicare (Cubanski et al., 2015). Medicare Advantage plans require some cost sharing, so there may be more opportunities to promote comparison shopping for beneficiaries in these plans.

Chapter 4. Conclusions

Using price transparency to promote consumer shopping for health care services is viewed as a way to lower health care spending. However, members of the TEP suggested that simply improving the price search websites would not be sufficient to improve their use to the point where consumers were having meaningful impacts on health care spending.

TEP members made the case for going beyond price information to incorporate better patient education and improved support around decisionmaking at the point of care. They stated that consumers want additional pieces of information, such as the network status of providers, whether providers accept new patients, and quality information. TEP members suggested many opportunities to improve the experience of consumers with the health care system in ways that are related, but may go well beyond simply promoting better comparison shopping websites. For example, the TEP members suggested that the federal government could enhance the work of states to address "surprise billing," improve the usability of price information for consumers, and provide leadership in adopting site-neutral payments that would help eliminate confusion.

TEP members noted that there are many other stakeholders in the system who could also use and share price information. TEP members suggested several ways the federal government could work to resolve data-sharing limitations, including establishing standard claims layouts, developing consistent ways of displaying price information, and encouraging interoperability of EHRs to facilitate point-of-care decisions. The TEP also suggested that the federal government could support APCDs through financial incentives and ongoing technical assistance to use data on health care spending to support state policymakers. Finally, TEP members suggested working with other federal agencies, such as the FTC and DOL, to resolve legal and regulatory barriers that impede the flow of price information.

The options suggested need further assessment in terms of ease of implementation, impact on spending, and potential for unintended consequences. Many of the policy ideas the TEP members generated would require multiple stakeholders, in both government and the private sector, to design and implement. Several of the possible policy options may be costly and time-consuming for organizations to implement. This includes setting up standardized definitions for metrics and moving to a system in which all organizations report the same information in the same way.

Furthermore, many of the ideas discussed may be in conflict with other goals or may have limited impact given other trends occurring in the health care industry. Price shopping may disrupt care coordination efforts or not account for value-based payments. Consolidation in health care markets may limit the impact of increased price transparency. Finally, much of the knowledge of TEP members stems from their experience in the commercial market. Many of the

factors discussed in promoting price transparency, including the underlying premise that comparison shopping will lower spending, are not as applicable to Medicare and Medicaid.

While price transparency holds promise, the discussion of our TEP suggests that lowering spending through more price competition is a complex problem that will take multifaceted solutions.

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