Seeing Through Price Transparency

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Abstract:

In light of unprecedentedly high health care prices, legislators have turned to price transparency to lower health care costs. But the benefits behind the theory of price transparency are not easily translated into practical solutions. The Price Transparency Rule, promulgated by the Centers for Medicare and Medicaid Services (CMS), has had underwhelming effects more than eighteen months after its effective date. As of August 2022, only 16 percent of hospitals were compliant with the Rule.

Although price transparency is thought to be an effective tool to fight increasing health care costs, the practical impact is uncertain. Studies demonstrate why the effects of price transparency in the U.S. economy may not be as intended. However, state price transparency tools known as all-payer claims databases (APCDs) have proven that price transparency can indeed provide benefits beyond offering consumers the opportunity to price shop for health care services. Data published through a state’s APCD can be analyzed by researchers and governments and can potentially influence the direction of future legislative efforts as they relate to lowering health care prices and combatting anticompetitive effects resulting from price transparency.

CMS should consider shifting its focus away from enforcing the current Price Transparency Rule, given its compliance failures, and explore other means to achieve the Rule’s intended purpose. For example, the No Surprises Act allows consumers to request an Advanced Explanation of Benefits or a good faith estimate before receiving services and could provide similar consumer-level benefits. And the APCD model may be a vector to achieving some of the broader policy goals relative to price inflation.

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INTRODUCTION

The cost of health care in the United States is more than double that in comparable industrialized countries, yet the volume of health care goods and services provided in the United States is approximately equal to that of other developed countries.\(^1\) Over the past twenty years, scholars have identified the primary cause of higher health care expenditures as the baseline price for goods and services.\(^2\) The continued increase in prices raises policy questions about the largest aging population in U.S. history and a patient-saturated and resource-deprived health care market. Although health care inflation has been a rising policy concern in most of America’s recent memory, the negative impact on hospital revenues caused by the COVID-19 pandemic, a decrease in health care market competition due to a spike in anticompetitive mergers in the past decade, and the nation’s highest rate of general inflation in the past forty years elevate this concern to a level of arguably unprecedented urgency.\(^3\) Some countries comparable to the United States support governmental price regulations that directly combat the issue

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1 Health Expenditure and Financing Data, ORG. FOR ECON. COOP. & DEV., https://stats.oecd.org/Index.aspx?QueryId=30171 [https://perma.cc/5EZ9-6RCZ] (noting that the United States spent 18.8 percent of its GDP on health care in 2020, followed by Canada at 12.9 percent). The United States does not report certain utilization statistics to OECD, however, recent data show that the United States has 26 percent fewer acute care beds per 1,000 people than the median OECD country. Gerard F. Anderson, Uwe E. Reinhardt, Peter S. Hussey & Varduhi Petrosyan, It’s the Prices, Stupid: Why the United States is So Different from Other Countries, 22 HEALTH AFFS. 89, 90 (2003) [hereinafter It’s the Prices, Stupid].

2 See Gerard F. Anderson, Peter S. Hussey & Varduhi Petrosyan, It’s Still the Prices, Stupid: Why the U.S. Spends So Much on Health Care, and a Tribute to Uwe Reinhardt, 38 HEALTH AFFS. 87, 93–94 (2019) (“Because the U.S. is still not devoting more real resources to medical care than the typical OECD country, we believe that the conclusion ‘it’s the prices, stupid,’ remains valid.”) [hereinafter It’s Still the Prices, Stupid]; see also It’s the Prices, Stupid, supra note 1, at 103 (concluding that the United States has higher health care prices because “spending is a product of goods and services used and their prices,” yet the United States had lower aggregate utilization than comparable countries).

of price inflation. These countries, however, operate within a government-funded, single-payer authority. On the contrary, the United States is hesitant to make an equivalent leap of faith in policymaking in order to maintain its capitalistic values. Instead, in a fragmented-payer market, the United States has primarily turned to the theory of price transparency to indirectly lower prices through market forces.

To date, the most prominent regulatory regime aiming to improve price transparency in health care is the Price Transparency Rule (Rule), promulgated by the Centers for Medicare & Medicaid Services (CMS). The latest of these regulations established that hospitals must publish their “chargemaster rates”—a comprehensive list of “standard charges” for items and services maintained by a hospital—in an easily accessible “machine-readable” file format and a price estimator tool for the 300 most common “shoppable services” by January 1, 2021. The stated purpose of the Rule is as follows:

By disclosing hospital standard charges, we believe the public (including patients, employers, clinicians, and other third parties) will have the information necessary to make more informed decisions about their care. We believe the impact of these final policies will help to increase market competition, and ultimately drive down the cost of healthcare services, making them more affordable for all patients.

But so far, the Rule’s impact has been underwhelming, largely due to high rates of noncompliance with the technical requirement. In February 2022, more than one year after the rule’s effective date, 86 percent of hospitals were...

4 Robert A. Berenson & Robert B. Murray, How Price Regulation Is Needed to Advance Market Competition, 41 Health Affairs 26, 27 (2022) (“Most [OECD] countries now favor regulation to restrain provider prices and strengthen competition over other important aspects of health care that are less amenable to successful regulation.”).

5 See discussion infra Part I (delineating the modern legal history of price transparency in the United States).

6 The “Price Transparency Rule” in this article is defined broadly as the collective rules that Health and Human Services’ (HHS) agencies have created to build a system that fixes the problem of price opacity. For more on the legal evolution of the Price Transparency Rule, see discussion infra Part I.

7 A machine-readable format is defined as a digital representation of data or information in a file that can be imported or read into a computer system for further processing. In the Price Transparency Rule, examples of machine-readable files include .XML, .JSON, and .CSV formats. Additionally, a shoppable service is defined as a service that a consumer can schedule in advance. 45 C.F.R. § 180.20 (2021) (definitions); 45 C.F.R. § 180.50 (2021) (requirements).


9 See discussion infra Sections I.C, II.C, II.D (showing trends in noncompliance, analyzing the Rule’s mechanisms, then explaining why the Rule likely will not effectuate its purpose).
noncompliant with the machine-readable or shoppable services requirements, or both.10 Furthermore, the most recent study, published in August 2022, found that compliance increased by only 2 percent since February.11

This Note scrutinizes the underlying theory of price transparency as a solution for increasing health care costs. But it also serves as a critique of CMS’s existing Price Transparency Rule—namely, the Rule’s required mechanisms—in a fragmented-payer marketplace.

Regarding price transparency writ large, this Note argues that it is a futile tool to directly combat price inflation due to the treatment of health care as a commodity in the U.S. market. On the existing Rule, it dives into the low rate of compliance and the multiple factors contributing to it, including an unworkable technical requirement, industry disdain for publishing standard charges, and, until recently, lack of enforcement. Even with maximal compliance, the Rule is unlikely to achieve its intended purpose due to low consumer awareness and a high burden to derive practical benefit from the machine-readable file.

This Note concludes that alternative mechanisms to achieve price transparency are better-suited to effectuate a public benefit. The No Surprises Act, for example, allows consumers to effectively price shop through its Advanced Explanation of Benefits (AEOB) requirement.12 And many states use all-payer claims databases (APCDs) as electronic tools to effectuate price transparency rather than the machine-readable requirement.13 Collectively, these policies have more potential to provide benefit than the federal Price Transparency Rule in the near- and long-term.

I. BACKGROUND

The United States leads the world in health care spending at 19.7 percent of


12 Although Advanced Explanations of Benefits (AEOBs) are non-public, they still benefit individual consumers by allowing them to compare prices between health care entities. See discussion infra Part I and Section II.E (relating the No Surprises Act to price transparency and the price shopping process).

13 Data from all-payer claims databases (APCDs) can be used by researchers and policymakers to define trends within the health care market, which may be used as the basis for future price control policy. See discussion infra Sections I.B, II.E (outlining use cases and system benefits of the APCD price transparency model).
its GDP. The latest research shows that this is slightly more than double the average GDP per capita spent on health care by other developed countries. The quality of care in the United States, however, is not necessarily representative of its higher rate of spending.

A well-known article, “It’s the Prices, Stupid,” published in 2003, was the first in-depth analysis into refined international health care data from the Organization of Economic Cooperation and Development (OECD). The article examined factors contributing to higher U.S. health care spending. One proposition is that the inputs (worker salaries, pharmaceuticals, medical technology, etc.) used to provide health care are more expensive in the United States than in other countries. Another is that U.S. health care is potentially more service intensive (i.e., provides more services per patient), less efficient, and requires more administrators than other countries. In any event, the data indicated that aggregate utilization, measured by physician visits and hospital days per capita, was below the OECD median, and thus the reason for higher health care costs was primarily due to pricing rather than overutilization. According to a recent poll, 80 percent of Americans believe that reducing health care costs should be a top domestic priority for the President and Congress.

The price of health care is steadily increasing. In 2020, health care spending

\[\text{increasing from 16.9 percent in 2019.}\]

\[\text{14 National Health Expenditure Data, CTRS. FOR MEDICARE & MEDICAID SERVS.,}\]

\[\text{15 Emma Wager et al., How Does Health Spending in the U.S. Compare to Other Countries?,}\]
\[\text{PETROR-KFF HEALTH SYSTEM TRACER (Jan. 21, 2022),}\]


\[\text{17 It’s the Prices, Stupid, supra note 1. Cf. It’s Still the Prices, Stupid, supra note 2 (repeating the original study using updated data, reinforcing the original conclusion, and then suggesting that policymakers should primarily focus on prices in the private sector).}\]

\[\text{18 It’s the Prices, Stupid, supra note 1, at 91.}\]

\[\text{19 Id. at 92.}\]

\[\text{20 Id. at 103.}\]

\[\text{21 Americans’ Domestic Priorities for President Trump and Congress in the Months Leading up to the 2020 Election, POLITICO & HARVARD T.H. CHAN SCH. PUB. HEALTH, (Feb. 2020),}\]
\[\text{https://www.politico.com/f/?id=00000170-5e12-de37-af75-fe3290b0000 [https://perma.cc/Q9PJ-T47V] (illustrating that this perspective crosses partisan lines: both Republicans and Democrats ranked lowering the cost of health care as the number one priority, followed by lowering the cost of prescription drugs).}\]
in the United States grew 9.7 percent from the previous year.\(^{22}\) The federal health insurance trust fund is expected to be depleted by 2026.\(^{23}\) And CMS predicts that health care spending will reach $6 trillion by 2027, nearly one-third more than the $4.1 trillion spent in 2020.\(^{24}\) As a result, funding for federal health insurance, which accounted for 25 percent of the federal taxpayer budget in 2022, will require more taxpayer dollars.\(^{25}\)

Alongside governmental concerns of intrinsically higher health care inflation are consumer concerns about price variation and unpredictability. In the case of newborn delivery and hospitalization, for example, reports have shown that those with private insurance pay anywhere from nothing to more than $10,000 out-of-pocket.\(^{26}\) Additionally, a report by the *Wall Street Journal* found that the price of a cesarean section, commonly an emergency procedure, can range from $6,000 to $60,000 out-of-pocket depending on the rate a health care provider negotiated with a patient’s insurer.\(^{27}\)

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An October 2022 study using data extracted from machine-readable files from more than 1,500 hospitals across the nation found substantial price variation. The study found that average “chargemaster prices” and “discounted cash prices” were 164 percent and 60 percent, respectively, above the “payer-specific negotiated rate.” Additionally, within these categories, the 90th to 10th percentile ratio indicating markup factors ranged from 3.2 to 11.5 for chargemaster prices, 6.1 to 19.7 for cash prices, and 6.6 to 30.0 for negotiated rates. The considerable variability in prices across U.S. hospitals can lead to vastly unpredictable cost obligations.

Some patients are fortunate to have the means to afford a surprise medical bill, but most Americans cannot. The lowest-earning Americans spend one-quarter of their income on health insurance. So, entering into a medical bill lottery can make or break their financial stability. High charges have been shown to disproportionately affect the uninsured, who are more likely to come from low-income households.

hospital charges depends on the insurance plan covering the birth.


29 Id. at 773; see 45 C.F.R. § 180.20 (2021) (definitions).

30 Linde & Egede, supra note 28, at 773.

31 See How Much of Americans’ Paychecks Go to Healthcare, Charted, ADVISORY BD. (May 2, 2019), https://www.advisory.com/en/daily-briefing/2019/05/02/health-care-costs [https://perma.cc/JME5-AYKM ] (examining the highest 10 percent of wage earners, who pay only 2.3 percent of total wages on health insurance); Lorie Konish, This is the Real Reason Americans File for Bankruptcy, CNBC (Feb. 11, 2019), https://www.cnbc.com/2019/02/11/this-is-the-real-reason-most-americans-file-for-bankruptcy.html [https://perma.cc/38JR-HFRP] (“A new study from academic researchers found that 66.5 percent of bankruptcies were tied to medical issues—either because of high costs for care or time out of work.”).

32 See Melanie Evans, Anna Wilde Mathews & Tom McGinty, Hospitals Often Charge Uninsured People the Highest Prices, New Data Show, WALL ST. J. (July 6, 2021) https://www.wsj.com/articles/hospitals-often-charge-uninsured-people-the-highest-prices-new-data-show-11625584448?mod=article_inline [https://perma.cc/JD7N-JC89] (showing that, compared to “deep-pocketed insurers,” patients who pay cash are “charged among the highest prices”). In addition to the uninsured, insured patients may find themselves paying an inflated “cash discount” rate if the hospital or service provided is out-of-network. See id.; Jennifer Tolbert, Patrick Drake & Anthony Damico, Key Facts About the Uninsured Population, KFF (Nov. 6, 2020), https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/ [https://perma.cc/6HDS-NCEC] (citing that 73.7 percent of uninsured patients state that the main reason for not purchasing insurance is due to high costs). And statistics show that certain racial and ethnic minorities are more likely to be uninsured. See Samantha Artiga, Latoya Hill & Anthony Damico, Health Coverage by Race and Ethnicity, 2010-2019, KFF (July 16, 2021), https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-coverage-by-race-and-ethnicity [https://perma.cc/GP8Q-BXND] (recognizing that the Affordable Care Act narrowed the gap by insuring more than 20 million individuals).
These significant, hard-to-predict costs have prompted the federal government to take steps to combat surprise medical billing and price opacity. The No Surprises Act (Act), for example, which became effective on January 1, 2022, protects privately insured patients from “surprise” medical bills.33 In its early stages, however, research on the Act has shown potential weaknesses, such as not providing equal coverage to government beneficiaries or the uninsured.34 The Act also promotes price transparency by requiring hospitals to provide a “good faith estimate” (GFE) or Advanced Explanation of Benefits (AEOB) to any patient who makes a request before seeking treatment.35 Although the Act provides price transparency on an individual patient basis, the principal tool the federal government has deployed to date in an effort to rein in industry-wide health care prices is the Price Transparency Rule. But most providers are not compliant with the Price Transparency Rule.36

In the modern era, the legal push for price transparency began with a 2006 executive order by former President George W. Bush.37 But the order only required federal agencies to disclose payer rates to federal health care program enrollees.38 The Patient Protection and Affordable Care Act of 2010 (ACA) then expanded the scope and application of price transparency requirements to the general public.39 The ACA added Section 2718(e) to the Public Health Service Act, entitled “Bringing Down the Cost of Healthcare Coverage,” which required hospitals to

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34 See Jay Hancock, An $80,000 Surprise Bill Points to a Loophole in a New Law to Protect Patients, NPR (Feb. 23, 2022), https://www.npr.org/sections/health-shots/2022/02/23/1082405759/an-80-000-surprise-bill-points-to-a-loophole-in-a-new-law-to-protect-patients [https://perma.cc/TR3T-H82Y] (describing a “loophole” where an insurer does not classify a service as an “emergency” or when the hospital fails to provide the insurer with the appropriate paperwork, a patient may be left with a surprisingly high out-of-pocket bill).


36 See discussion infra Section I.C (examining noncompliance).


38 Id. at 51,090.

annually publish standard charges. A technical provision on the mechanisms of electronic publication was absent, however, until CMS added the machine-readable requirement to the Price Transparency Rule in January 2019.

Six months later, an Executive Order charged CMS with amending other aspects of the Rule, which complicated technical compliance with the machine-readable format. Instead of publishing only “gross charges,” the order expanded the definition of standard charges, requiring payer-specific negotiated rates and discounted cash price to be published in the machine-readable format. Gross charges are largely irrelevant to consumers because they represent the amount that a provider charges for a good or service prior to incorporating the payer-negotiated rate. Without knowing the latter rate, a consumer could not extract any practical benefit from a provider’s gross charge, unless the patient was uninsured, even though providers usually have a separate discounted charge for uninsured, cash-paying patients. The Rule also created the first civil monetary penalty provision for noncompliant entities with enforcement set to begin on January 1, 2021, and required hospitals to publish the prices for 300 shoppable services, such as X-rays or MRIs. In theory, these new provisions filled in some crucial spaces left open by previous efforts, such as by including payer-specific negotiated rates and discounted cash prices. But more than eighteen months after the initial enforcement deadline, the results of the rule were still underwhelming. To illustrate, two of the three largest health care systems in the United States, HCA Healthcare and Ascension, were noncompliant.

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40 42 U.S.C. § 300gg-18(e) (2010) (“Each hospital operating within the United States shall for each year establish (and update) and make public (in accordance with guidelines developed by the Secretary [of HHS]) a list of the hospital’s standard charges for items and services provided by the hospital . . . .”).


42 See Exec. Order No. 13,877, 84 Fed. Reg. 30,849, 30,850 (June 27, 2019) ("[The Secretary] shall propose a regulation . . . to require hospitals to publicly post standard charge information, including charges and information based on negotiated rates and for common or shoppable services . . . ."); 45 C.F.R. § 180.50(b) (2021) (listing required data elements); 45 C.F.R. §§ 180.50(b)(3), (b)(6) (2021) (payer-specific negotiated rates and discounted cash prices); see also 45 C.F.R. § 180.20 (2021) (definitions).

43 CY 2020 Price Transparency Final Rule, 84 Fed. Reg. 65,524, 65,571, 65,589 (Nov. 27, 2019) (final action regarding shoppable services requirement and civil monetary penalty); 45 C.F.R. § 180.20 (2021) (defining “shoppable service” as a service that can be scheduled by a health care consumer in advance); 45 C.F.R. § 180.60 (2021) (requirements for publishing shoppable services); 45 C.F.R. § 180.70(b)(3) (2021) (civil monetary penalty).


A. Desired Benefits of Price Transparency

Beyond the direct-to-consumer benefit of allowing patients the opportunity to price shop, there are several other desired benefits that price transparency could indirectly effectuate. But the probability that these benefits will result from maximum price transparency on a national level remains hard to predict a priori.

First, there is the desired benefit that lower health care prices will result from a patient’s ability to price shop. Many scholars have predicted that price transparency will promote price-lowering competition in health care markets by appealing to price-conscious consumers. Under this theory, providers would lower their prices to attract more consumers, resulting in a net decrease in health care spending in the aggregate. This is the aim of the Price Transparency Rule; however, scholars note that industry-wide price-lowering from price transparency largely depends on competitive factors in a particular market.

Others have predicted that prices would be lowered out of a provider concern that publishing overinflated prices would damage their reputation, and thus deter business from consumers driven by social and ethical values. It is hypothesized that nonprofit and government hospitals that are established for a charitable purpose and to support public health would face the most consumer scrutiny and would be more likely to lower prices for this reason than would for-profit hospitals. But the impact of this causal factor would most likely also be widely variable between markets.

Moreover, there is a theory that hospital price transparency would shift some of the bargaining power that providers have during contract negotiations with payers to provide for a more balanced market equilibrium. This balance could incentivize providers to lower the rate they charge payers in order to more closely match competitor rates for the purpose of preserving a longstanding relationship,

46 See Uwe E. Reinhardt, Health Care Price Transparency and Economic Theory, 312 JAMA 1642, 1643 (2014) (analyzing a recently published study that found that employees who used a price transparency tool paid lower prices compared to those who did not; however, emphasizing the authors’ own acknowledgement of study weaknesses, including a small sample size).
47 See id. (“[G]reater transparency about prices [] in health care [is] not helpful if the relevant market for health care is monopolized.”).
48 See Hans B. Christensen, Eric Floyd & Mark Maffett, The Only Prescription is Transparency: The Effect of Charge-Price-Transparency Regulation on Healthcare Prices, 66 MGMT. Sci. 2861, 2876 (2020) (concluding that “high charge prices have significant reputational costs and that, following [the Rule], hospitals likely alter pricing policies [and mitigate the costs of perceived overpricing] . . . .”).
49 Id. at 2873–74 (“Because nonprofit hospitals must justify the benefits they provide to the community in order to maintain their nonprofit status, these hospitals are likely more sensitive to perceptions of overcharging . . . [And] the public puts pressure on politicians to provide oversight of [government-owned] hospitals.”).
especially in markets with more provider competition. The impact of lowering costs through any of these mechanisms could provide a tremendous benefit to patients and insurers.

Second, price transparency would benefit policymaking by giving legislators more information on which to base policy decisions. On a case-by-case basis, the data could be used to identify particularly high-charge outliers, which could be a target of state legislative efforts. On a larger scale, price transparency would allow researchers nationwide to have access to a horde of online data and to generate meta-analyses. The results from these systematic studies would be highly valuable to federal legislative efforts aimed to control price inflation in health care and to measure the effectiveness of ongoing legislative efforts.

Despite the convincing list of benefits that price transparency could theoretically provide, compelling contrarian perspectives exist, supported by recent data, that address the likelihood that maximum price transparency would provide a net benefit, particularly as a tool to provide tangible cost-reduction to consumers and insurers.  

### B. State Price Transparency Efforts

States often lead by example in adopting novel legislation, and the case of health care price transparency provides no exception. Several states have adopted means of facilitating health care price transparency through a variety of mechanisms. The most effective has been the adoption of all-payer claims databases (APCDs).

An APCD is defined as "a comprehensive collection of medical claims data from both public and private payers with information specific to individual plans, patients, and procedures." These APCDs can directly benefit consumers who are

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51 See discussion infra Section II.A (detailing the uncertain impact of price transparency, writ large).


interested in finding their out-of-pocket costs rather than “standard charges” that provide little practical benefit on a consumer level. These databases also inform sound policy judgment by consolidating all payer and provider claims data into one consumer-facing website that is easy to access. Additionally, states can develop a variety of price transparency applications that extract data from the APCD. State legislation varies on whether to mandate disclosure or make it voluntary, even though the amount of data disclosed is smaller when disclosures are made on a voluntary basis.

The 2020 APCD Report Card “graded” states on the functionality of their respective databases. While only sixteen states received a “passing” grade, each state was scored according to the scope of content, ease of use, utility, and timeliness/accuracy.

Colorado received a high score for including cost, utilization, and quality reports, and using the data to assess price variability across the state. The Center for Improving Value in Healthcare, a Colorado nonprofit organization, used the APCD to compare commercial insurer reimbursement rates as a percentage of Medicare. Massachusetts received a similarly high score as the Health Policy Commission, a state agency, collected data on health care transactions and assessed health care cost growth while facilitating a review of the effect on competition resulting from the transactions, among other purposes. Further, New Hampshire, one of only two states that received an “A” (Maine is the other state), used the data to create provider network adequacy and balance billing laws. These three states’ APCDs provide effective examples on how to achieve a high level of benefit from price transparency through an APCD.

C. Current State of Noncompliance with the Federal Price Transparency Rule

Notwithstanding the concept of price transparency, the practicability of the Price Transparency Rule was questioned in Proposed Rule comments and in subsequent litigation.

55 Id. at 15.
56 Id. at 16.
57 Id.
58 See CY 2020 Price Transparency Requirements, 84 Fed. Reg. 65,524, 65,550 (“[M]any commenters asserted that such information is either ‘non-existent’ or is not available without significant manual effort . . . .”); Am. Hosp. Ass’n v. Azar 983 F.3d 528, 536–38 (D.C. Cir. 2020) (“The Association advances two slightly different arguments under the umbrella of excessive burden. First, many negotiated rates are ‘unknown’—or even ‘unknowable,’ as Association counsel insisted at oral argument—so complying with the rule is ‘impracticable, and often impossible.’”).
One concern had to do with the burden on hospitals to publish a complete and accurate machine-readable file by narrowing down standard charges, including payer-specific negotiated rates, in the vast web of complex payer-provider agreements. The Proposed Rule far underestimated the number of hours (as twelve) for a hospital to publish standard charges. But this absurd estimate was expanded to 150 hours in the final rule and held “reasonable” by the D.C. Circuit, with little explanation in the opinion.

Next was concern with publishing a complete machine-readable file. During promulgation, CMS specifically sought comment on whether it should require an alternative technological approach with a standards-based Application Programming Interface (API)—a piece of software that allows systems to “talk” to each other by connecting, extracting, translating, sending, and installing a message between systems—rather than a machine-readable file. The API approach may have streamlined the price transparency process by automatically sending data to the consumer upon request. But ultimately, CMS chose the machine-readable file, labeling its decision as a “good initial step” towards price transparency while leaving open the possibility of a standards-based API requirement as a product of future rulemaking once compliance with the machine-readable requirement has “matured.”

Since the Price Transparency Rule became effective on January 1, 2021, several reports have shown startlingly low rates of compliance. In January 2022, reports have shown starkly low rates of compliance. In January 2022, several reports have shown startlingly low rates of compliance.

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59 See discussion infra Section II.B (expanding on the complexity of the fragmented payer marketplace and payer-provider agreements).

60 The American Hospital Association argued that Secretary Azar “failed to adequately address the difficulties that hospitals face in compiling the information the rule requires” and thus violated the Administrative Procedure Act. However, the court responded that the Secretary adequately “acknowledged” the challenges of aggregating their different rates, and therefore expanding the burden estimate and extending the compliance deadline was sufficient evidence that the rule was not overly burdensome. Am. Hosp. Ass’n v. Azar, 983 F.3d 528, 536–538 (D.C. Cir. 2020).


62 This technological approach is explored as a means of complying with the No Surprises Act to send consumers a GFE or AEOB before seeking treatment. See discussion infra Section II.E.

63 CY 2022 Price Transparency Rule with Comment Period, 86 Fed. Reg. 63,458, 63,954 (Nov. 16, 2021). It is likely that CMS’s idea for public machine-readable files was for third-party app-developers to extract the pricing data through an API and send it to a consumer without putting the burden of implementing APIs on providers. But arguably, easily installable standards-based APIs, such as Fast-Healthcare Interoperability Resource (FHIR), would be more effective than the machine-readable file. See generally What is FHIR?, OFFICE OF THE NAT’L COORDINATOR FOR HEALTH INF. TECH., https://www.healthit.gov/sites/default/files/2019-08/ONCFHIRFSWhatsFHIR.pdf [https://perma.cc/4D44-CG4D].

a study of New York-area hospitals found that only 12 percent of hospitals were fully compliant with the machine-readable requirement six months after the Rule’s effective date. Further, the study found that implementation of the machine-readable requirement is lagging compared to the shoppable services requirement, for which 69 percent of hospitals were fully compliant.

A Patient Rights Advocate study published in February 2022 found that only 143 out of 1,000 hospitals were fully compliant with the Rule; moreover, it found that the other 857 hospitals were noncompliant for failing to publish a complete machine-readable file. An incomplete machine-readable file was judged based on a failure to provide all required prices for items and services, sometimes listing a zero, an asterisk, or the value “N/A.” In some cases, hospitals did not include any prices for some of their accepted insurance plans.

Six months later, in August 2022, Patient Rights Advocate published the third semi-annual study, this time reviewing 2,000 hospitals instead of only 1,000 from the February study, with little optimism to report. Of the hospitals reviewed, only 16 percent were compliant with the machine-readable and shoppable services requirements. Interestingly, some hospitals that were compliant in the February study became noncompliant by removing entire columns of payer-specific negotiated rates or clearly omitting multiple data points.

II. ANALYSIS

A. The Uncertain Effects of Price Transparency

There is a lack of consensus on the effects of price transparency on the health care economy; namely, whether price transparency will stimulate price-shopping and drive down health care prices by market forces or whether it will compel lower prices through other mechanisms.

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York-area hospitals); PRA Feb. ‘22, supra note 10 (reviewing 1,000 hospitals nationwide); PRA Aug. ‘22, supra note 11 (reviewing 2,000 hospitals nationwide).

65 ARIO ET AL., supra note 64.

66 Id. at 5 (noting that 69 percent of hospitals partially implemented the machine-readable requirement).

67 PRA Feb. ‘22, supra note 10, at 2; see Advocacy Group Faults Hospitals for Failing to Comply with Price Transparency Rules, WASH. POST (July 16, 2021), https://www.washingtonpost.com/context/advocacy-group-faults-hospitals-for-failing-to-comply-with-price-transparency-rules [https://perma.cc/M6JL-RE3Y] (“The majority of noncompliant failures were the result of non-posting or incomplete posting of the negotiated prices clearly associated with all of the payers and plans accepted by the hospital. The second significant failure was due to a lack of publishing the full list of discounted cash prices.”).

68 See PRA Aug. ‘22, supra note 11, at 4 (presenting results).

69 Id. at 2.

70 See id. at 2 (“[Twenty-six] of the previously compliant hospitals have become noncompliant . . .”).
In 2014, one of the first impactful studies measuring the use of an online price transparency tool evaluated its effect on consumer choice in health care decisions. The study examined the use of a platform that allowed employees at firms with self-insured (employer-sponsored) plans to compare out-of-pocket costs between competing providers for lab tests, imaging services, and clinician office visits. The data show that patients who utilized the price transparency tool before receiving services paid lower prices than those who did not access the tool. The authors recognize the study’s limitations—namely, assessing data for only three services and the small patient sample size—but the study nevertheless strengthens the argument for a consumer-driven, market-based approach to lowering prices and has initiated further impactful research.

Economic theory to support price transparency comes from a market advocacy perspective. To drive down the cost of health care through competition, consumers must know the prices in advance in order to bargain between providers. By giving consumers the ability to shop around and barter, the thinking goes, providers will undercut competitors by lowering their own prices, even slightly below a competitor’s rate.

But in 2020, one of the first large-scale studies found that price transparency regulation has no statistically significant impact on consumer payments or behavior. Although the data show that hospital prices decrease by approximately 5 percent after states adopt price transparency regulation, the authors conclude that the decrease is attributable to hospitals lowering prices of their own accord rather than by consumer-driven market forces. The study also finds no real benefit to patients resulting from lower prices because the benefits stop short of providing a patient with a lower out-of-pocket cost. To compensate for lowering baseline


72 See id. at 1673 (finding that employees who accessed the tool prior to receiving services paid 13.9 percent less for lab tests, 13.2 percent less for imaging, and 1.02 percent less for clinician office visits than those who did not access the tool prior to receiving services).

73 See id. at 1675 (delineating limitations such as not randomly assigning searching to certain employees, potential bias in contemporaneous events that could have prompted searching, whether the results generalize to those who chose not to search, and omitting quality, convenience, or other nonprice attributes to the decision to choose a particular provider).

74 See Christensen et al., supra note 48 (relying on a robust dataset from twenty-seven states with price transparency regulation over a seven-year period).

75 See id. at 2869 (“[Analysis] suggests that the majority of the observed decline in charges is attributable to hospitals lowering their charges rather than patients selecting lower-charge hospitals.”).

76 See id. at 2872 (“Our evidence [] suggests that, although [the Rule] leads to a decrease in charges for disclosed procedures, hospitals are able to avoid passing these charge reductions on to patients in the form of lower payments.”).
charges, hospitals were shown to reduce discounts offered to consumers via payer contracts. 77 This study indicates that hospitals decrease charges as a result of price transparency regulation, yet do so out of institutional pressure to protect their reputation rather than changes in consumer shopping behavior. 78

Moreover, a report that conducted a broad-scope literature review on price transparency measured the impact on overall patient costs. 79 The results show that transparency benefits only the most financially-conscious patients and that impact on consumers is weak due to low price transparency tool utilization. 80 The authors suggest reasons why price transparency tools are not highly utilized, such as if a patient has already met their deductible and is therefore not directly responsible for the cost, a patient’s loyalty to a particular physician or care provider, or lack of alternate provider options due to geography. 81 The report concludes that policymakers should not assume that consumers will use price transparency tools simply because they exist, without additional incentives or display alongside quality indicators. 82 And it urges policymakers to consider the limited usefulness of “standard charge” data for insured consumers because the data do not represent the patient’s out-of-pocket cost. 83

On the argument that price transparency will shift bargaining power towards payers in provider-payer contractual negotiations, it is important to consider that the Payer Price Transparency Rule, effective July 1, 2022, will allow payers to compare provider reimbursement rates for the first time, leveling the playing

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77 See id. at 2876 (“[O]ur results suggest that, in response to PTR, providers do lower charges; however, they also decrease discounts such that these charge reductions do not lead to consumer savings.”).

78 Id. (“[W]e find that reputational costs of perceived overcharging is the most likely explanation for the reduction in charges.”).

79 See Angela Zhang et al., The Impact of Price Transparency on Consumers and Providers: A Scoping Review, 124 HEALTH POL’Y 819 (2020) (categorizing the eighteen articles used in the study by consumer behavior and outcomes, provider behavior, and insurer outcomes).

80 See id. at 823 (“The impact on consumer costs was strong within the subset of price-aware patients, however, weak amongst all consumers with access to the tool due to low usage.”).

81 See id. at 823 (including an argument that price transparency tools could contribute to health care inequality for low-income and elderly persons who are less tech-savvy or lack an adequate internet connection or the requisite technological equipment).

82 See id. at 824 (describing an employer bonus incentive for choosing less expensive providers); see also Ethan M.J. Lieber, Does It Pay to Know Prices in Healthcare?, 9 AM. ECON. J.: ECON. POL’y 154, 177 (2017) (“[A]ccess to price information could have large impacts in the market for health care, but considering consumers’ incentives to search is of primary importance.”); Sunita Desai et al., Offering a Price Transparency Tool Did Not Reduce Overall Spending Among California Public Employees and Retirees, 36 HEALTH AFFS. 1401, 1406 (2017) (suggesting that combining price transparency tools with alternative benefits for usage, such as offering a cash bonus to employees who switch to lower cost providers, could increase the usage of price transparency tools).

83 A patient can calculate their out-of-pocket cost with “standard charge” data by subtracting the payer-negotiated rate from the hospital’s gross charge. But see discussion infra Section II.D (illustrating the consumer-facing challenges of the machine-readable file).
With both provider and payer price transparency, each party would have access to information that has historically been kept under wraps. But, the usefulness of this information in negotiation will likely vary on a case-by-case basis based on the characteristics of a specific market. For example, using prices as a bargaining tool is more effective in markets with more competition in the industry of the party on the opposite side of the contract, whether it is the sell-side or the buy-side.

A number of price transparency skeptics argue that price transparency will have anticompetitive effects and induce price increases. In American Hospital Association v. Azar, the American Hospital Association (AHA) asserted that institutions that currently charge less than competitors will increase their prices to match competitors, raising prices market-wide. It is no secret that the AHA was highly against the idea of allowing payers to access their pricing information, previously concealed under contracts, because of a threat of losing bargaining power during negotiations. The court wrote that Secretary Azar was not required to rely on “definitive” rather than “predictive” economic data in establishing these requirements because of the novelty of the rule and that reliance on studies of similar price disclosure schemes in other industries was sufficient to inform a stable policy judgment. However, there are economic studies that predict effects opposite to those relied on by the Secretary.

In the late 1990s, the Federal Trade Commission and the Department of Justice provided guidance on the use of surveys that would allow providers to share price information. But the agencies have maintained some skepticism regarding

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85 But see discussion infra Section II.B (describing the payer-provider challenges of generating precise data).

86 Younts & Russo, supra note 50 (“Whether and how much the data may impact contract negotiations will depend on the specific market and the service mix of the providers within each market.”).

87 983 F.3d 528, 538 (D.C. Cir. 2020) (“[T]he Association claims, the [R]ule is likely to . . . ’facilitate anticompetitive effects.’”).

88 Id. at 539.

89 See Christensen et al., supra note 48, at 2876 (“[O]ur results suggest that, in response to PTR, providers do lower charges; however, they also decrease discounts such that these charge reductions do not lead to consumer savings.”); Robert F. Graboyes & Jessica McMoroney, Price Transparency in Healthcare: Apply with Caution, MERCATUS CTR. (Aug. 2020) (articulating the anticompetitive effects of price transparency resulting from supply-side “tacit collusion” to maintain inflated prices). But see Katherine L. Gudiksen, Samuel M. Chang & Jaime S. King, The Secret of Health Care Prices: Why Transparency Is in the Public Interest, CHCF 12 (July 2019), https://www.chcf.org/wp-content/uploads/2019/06/SecretHealthCarePrices.pdf [https://perma.cc/ZE4R-QF45] (recommending that price transparency data be released to subgroup in tiers, beginning with the public, followed by academic or government entities, then to private entities or industry participants).
provider transparency without “safeguards” that could result in anticompetitive effects, like “tacit collusion” to maintain high charges industry-wide.90 The agencies created a “zone of reasonableness” that was presumed as long as the survey was (1) managed by a third party, such as a government agency or an academic institution; (2) the data provided was more than three months old; and (3) at least five providers reported data on each statistic and no individual provider’s data accounted for more than 25 percent of each statistic, and that the disclosed information was sufficiently aggregated to avoid identification of a particular provider.91 These survey guidelines, although more than twenty years old, still exist today and are used by states in establishing their APCDs.92

Another part of the issue in predicting results from price transparency comes from the uniqueness of the health care economy, making it difficult to compare to other markets. For example, many consumers develop loyalty to a particular hospital or physician.93 In these cases, a patient might base their decision primarily on receiving advice from one they trust rather than the out-of-pocket cost of care, especially if the price difference is merely negligible.

Moreover, quality of care may be a consumer’s primary consideration before seeking treatment, trumping price considerations. Although “quality” is an extremely complex measurement, ironically, a consumer might associate paying more with receiving higher-quality care.94 Thus, unless this consumer has access to quality-of-care information alongside pricing information, they are more likely to make fallacious assumptions about this correlation. Of the state price-transparency policies reviewed, Colorado, Massachusetts, and Minnesota each use their APCD to generate quality of care reports.95

Each of these perspectives speculates on what could occur with prices on a consumer- and industry-wide level with maximal federal price transparency, which is a stretch given the low compliance rates with the existing rule.96

B. The Pseudo-Achievability of Price Transparency in a Fragmented

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90 See Graboyes & McBirney, supra note 89 (on the anticompetitive effects of price transparency).
91 Gudiksen et al., supra note 89, at 12.
92 Id.
93 David Blumenthal, Lovisa Gustafsson & Shanoor Seervai, Price Transparency in Health Care Is Coming to the U.S.—But Will It Matter?, HARV. BUS. REV. (July 3, 2019), https://hbr.org/2019/07/price-transparency-in-health-care-is-coming-to-the-u-s-but-will-it-matter [https://perma.cc/E9QV-ZPHL] (“If you have an orthopedist or neurosurgeon you trust for your back surgery and she uses hospital A which is more expensive, are you going to abandon her for another physician who uses the cheaper Hospital B?”).
94 Roslyn Murray et al., supra note 54, at 6.
95 Id. at 15–16.
96 See discussion supra Section I.C (providing evidence on the current state of noncompliance).
Marketplace

Price transparency is an extraordinarily complex task, especially in a fragmented-payer marketplace. In countries with single-payer systems, such as Canada or those in Europe, billing is simplified because hospitals bill the same entity over and again. But in the United States, the public-private payer dichotomy results in billing frenzies, with hospitals contracting with tens or potentially hundreds of payers, each agreement governed by idiosyncratic terms and conditions.

The rate paid by an insurer is often dependent on a variety of factors that are indeterminable before services are performed. For example, a certain procedure might cost less if it is “bundled” with another one, but this might be impossible to know before the initial procedure is underwent (e.g., a surgeon discovers and repairs a torn meniscus during a knee operation to repair a torn ligament). Additionally, a payer might receive a “volume discount,” the foundation of which seems arbitrary because of the frequency with which policy manuals are updated.

Each amendment in a payer’s policy manual can create a butterfly effect on negotiated rates, resulting in the standard practice of retrospective rather than prospective billing. The AHA unsuccessfully asserted that Secretary Azar violated the Administrative Procedure Act by overstating the Rule’s benefits. The Secretary predicted that consumers would have accurate pricing information to rely on as a result of full compliance with the Rule. But the variable nature of a myriad of payer-negotiated rates implies the contrary.

The Rule only requires publishing “baseline” charges, yet the reality is that baseline negotiated-rates are highly susceptible to flux. As described in the next Section, the complexity of payer-provider agreements has resulted in near sweeping noncompliance with the Price Transparency Rule.

C. Persisting Challenges of the Price Transparency Rule’s Mechanisms

Studies show that the primary reason for noncompliance is not publishing a complete machine-readable file. This may be due to challenges in data

98 See It’s the Prices, Stupid, supra note 1, at 98 (comparing the fragmented U.S. payer system, which requires more resources, than countries with “simpler” systems).
99 See supra note 58 and accompanying text.
101 See Waqas Haque et al., Adherence to a Federal Hospital Price Transparency Rule and Associated Financial and Marketplace Factors, 327 JAMA 2143 (2022) (finding that, out of 5,239
aggregation, data input into the file, updating the data as rates change, or publishing the file in an easily accessible manner.

The aggregation burden is excessive because the number of price data points required for a complete chargemaster list may reach into the hundreds of millions. Northwell Health, for example, has over 200 million data points to convert into machine-readable format in order to be fully compliant.102 The Executive Vice President at Northwell has commented on the challenges of meeting this burden, especially during the COVID-19 pandemic.103 The results from the New York study show that machine-readable compliance is substantially less than compliance with the 300 shoppable services requirement.104 These results support the view that volume of data itself is a barrier to compliance.

From a business perspective, providers are generally highly resistant to publicizing their standard charges, especially payer-specific negotiated rates. Such hesitance stems from a concern that the Rule may indeed change consumer behavior, causing them to lower baseline charges, or that other providers would undermine their prices when negotiating with mutual payers. Whatever the motivation, an investigation published by the Wall Street Journal in March 2021 reported that several provider systems embedded a web-search blocking code so that prices would be undiscoverable from a mainstream search engine.105 When hospitals, 1,542 had no machine-readable file, 729 had no shoppable services display, and only 5.7 percent had both, leaving 2,668 hospitals without either a machine-readable file or a shoppable services display; see also PRA Feb. ’22, supra note 10 (assessing compliance of 1,000 hospitals based on publishing a complete machine-readable file and a price-estimator tool for 300 shoppable services); PRA Aug. ’22, supra note 11 (same assessment for 2,000 hospitals); JOEL ARO ET AL., supra note 64 (assessing New York-area hospitals).

102 This number is likely generated by providers according to a complex equation that includes factors such as the number of payer contracts, the goods and services those contracts cover, the goods and services provided by the hospital, bundled payments, volume discounts; and multiplies by five to accurately reflect the “standard charge” subdivisions required in the machine-readable file for each good, service, or bundle thereof.

103 Richard Miller, Executive Vice President at Northwell Health in Hyde Park, NY, commented on Northwell’s attempt at compliance: “We are working to comply with the new CMS requirement to post a more robust machine-readable list of standard hospital charges, including gross and payer-negotiated rates. This list requires an analysis of more than 200 million data points, and we are working toward posting it as soon as possible—while also, like health care institutions around the country, focusing on the rollout of the COVID-19 vaccines and meeting the needs of large numbers of seriously ill patients,” Alia Paavola & Katie Adams, Where Price Transparency Compliance Stands at the Mayo Clinic, Providence + 6 Other Systems, BECKER’S HOSP. REV. (Jan. 25, 2021), https://www.beckershospitalreview.com/finance/where-price-transparency-compliance-stands-at-mayo-clinic-providence-6-other-systems.html [https://perma.cc/4U3A-BG6D] (emphasis added).

104 JOEL ARO, ET AL., supra note 64, at 5.

Wall Street Journal reporters confronted providers, some of them immediately removed the code; others claimed ignorance or that it was a legacy code.\textsuperscript{106} The results of this investigation might indicate that, in some circumstances, industry is proactively making access more difficult. But from a technological perspective, publishing an enormous machine-readable file is unlikely to come without its own set of challenges.

Interestingly, the Patient Rights Advocate August 2022 study found that twenty-six hospitals that were compliant with the rule in February were no longer compliant because eighteen of them removed plan names from their files and eight are now missing substantial pricing data.\textsuperscript{107} It is hard to speculate why the plan names were removed, but given the fluctuating nature of payer-negotiated rates, the eight formerly compliant hospitals that now omit pricing data may have done so because that data is either impracticable or impossible to pinpoint.\textsuperscript{108} It is also possible that the hospitals intentionally omitted these data to preserve what they consider a “trade secret.”\textsuperscript{109}

\textit{i. Potential Ways to Stimulate Compliance}

\textit{a. Expand the Technical Requirement}

As an alternative to the machine-readable requirement, CMS could allow Application Programming Interfaces (APIs) that streamline price information from the hospital billing system to the payer, and then into a user end point, such as a personal computer via a patient portal or a personal smartphone, to achieve compliance. APIs can connect to machine-readable files to streamline data transfer and can also connect with provider Electronic Health Records (EHRs), many of which include billing capabilities. APIs are already being utilized in a variety of Health IT criteria, such as the Meaningful Use of Electronic Health Records requirements that allow patients to view their medical record from an online patient portal via a smartphone or web-device, and could also be designed to facilitate transfer of pricing information. Standards-based APIs, such as Fast Healthcare

\textsuperscript{106} Id.
\textsuperscript{107} PRA Aug. ’22, supra note 11, at 2.
\textsuperscript{108} See supra note 58 and accompanying text.
\textsuperscript{109} See Kayla Leland Pragid & Shanice Cameron, Price Transparency in Hospitals—Is Hospital Pricing a Protected Trade Secret?, JD SUPRA (Sept. 13, 2021), https://www.jdsupra.com/legalnews/price-transparency-in-hospitals-is-2390227/ [https://perma.cc/36XR-YH76] (applying trade secret law from Kansas as an example of a conflict with federal price transparency efforts); Gudiksen et al., supra note 89, at 6–10 (presenting trade secret laws; then analyzing the plausibility of a successful trade secret claim as it related to provider charges).
Interoperability Resource (FHIR), are easy to implement and to connect with third-party apps. Although CMS does not prohibit providers from streamlining price data through interoperability with APIs directly to consumers, this is deemed insufficient to comply with the Rule. The providers are still required to publish a complete machine-readable file. In light of the benefits and uses of APIs and interoperability to achieve the desired result of the Rule (i.e., allow consumers to price shop), CMS should consider amending the rule to allow alternative means of technical compliance.

b. Increase Enforcement

A July 2021 Executive Order by President Biden aimed to increase competition in health care markets. This Order prompted CMS to increase the maximum daily penalty for noncompliance from $300 per day to $5,500 per day for hospitals with more than 550 beds, with a maximum fine of $2 million per year. So far, only two noncompliant hospitals have been fined: Northside Hospital Atlanta ($883,180) and Northside Hospital Cherokee ($214,320). The Patient Rights Advocate study found that both hospitals have now posted “exemplary” machine-readable files. If CMS wants to stimulate compliance, increasing audits and fining more hospitals could do just that, but this is unlikely to be the most desirable action given agency resource shortages, the failure of the Rule in effectuating its purpose more than eighteen months after the effective date, and the financial and operational struggles that hospitals are experiencing as a result of the recent COVID-19 pandemic. But, the effects of price transparency on health care prices are still uncertain, and the potential benefits could plausibly outweigh the drawbacks, especially with the potential for researchers to utilize the data in studies that could influence policy direction. Given that fines seem to

110 See generally What is FHIR?, supra note 63. The health care app market that connects with FHIR is known as “SMART on FHIR.” A number of apps have been developed and are available through Apple, Microsoft, Google, Epic, and Cerner, among others that perform a variety of services that require interoperability. See, e.g., Top 5 Groundbreaking SMART on FHIR Apps, KMS (Apr. 8, 2022), https://kms-healthcare.com/top-5-smart-on-fhir-apps/ [https://perma.cc/J7YV-RUY7] (presenting examples of effective uses of SMART on FHIR apps).
112 45 C.F.R. § 180.90(c) (2021).
113 PRA Aug. ’22, supra note 11, at 3.
114 Id.
115 See Report: Hospitals Face Worst Year Financially Since Start of COVID-19 Pandemic, Jeopardizing Access to Patient Care, supra note 3 (listing factors including “severe workforce shortages, broken supply chains, the Medicare 2% sequester kicking back in[,] and rapid inflation . . . .”).
induce compliance, CMS may consider increasing enforcement as a valid option.

D. Complying with the Price Transparency Rule Provides Little Benefit to Consumers, Stifling the Spirit of the Law

In the inconceivable event that every hospital posted a complete machine-readable file with up-to-date, accurate pricing information, it is still unlikely that consumers would price shop for health care because of its uniqueness as a commodity, low public awareness, and a variety of other reasons.116 One study found that only 9 percent of adults were aware that hospitals were required to publish prices on their website.117 It is possible that awareness would increase if consumers positively benefitted from the price shopping process, but in its current state of near sweeping noncompliance, consumers are highly unlikely to receive any benefit at all. And the machine-readable vector is painstakingly hard for consumers to navigate and does not provide the most desirable levels of price transparency.118

An investigation in California found that the machine-readable requirement prevents the public from adequately price shopping due to the complexity and volume of the data, which makes the consumer-facing file too confusing to organize and comprehend. Spending multiple hours trying to price shop between Kaiser Permanente and Sutter Health, the investigator found that Current Procedural Terminology (CPT) codes for the same procedure were sometimes listed in the spreadsheets multiple times, thousands of rows apart, with entirely different prices.119 From a consumer perspective, the machine-readable price shopping process may even result in adverse physiological effects.120 Thus, if the machine-readable requirement is fully complied with, it would likely only benefit patients with a high level of determination and technical competency.

Consider an illustration. Patient A injures their knee in an accident and is immediately rushed to a hospital. At the hospital, a physician orders an MRI and Patient A is eventually diagnosed with a torn ACL. Instead of scheduling surgery with the hospital immediately, Patient A wants to experience the hype of the Price

116 See discussion supra Section II.A.
118 See Bernard J. Wolfson, Effort to Decipher Hospital Prices Yields Key Finding: Don’t Try It at Home, CAL. HEALTHLINE (July 9, 2021), https://californiahealthline.org/news/article/effort-to-decipher-hospital-prices-yields-key-finding-dont-try-it-at-home/ [https://perma.cc/6XNW-YUG3] (detailing the experience of trying to locate and navigate a machine-readable file, then concluding, “don’t try this at home”).
119 Id.
120 Id. (reporting headaches, eyes “glazing over,” and fatigue).
Transparency Rule and conduct a private search to find the best bargain.

First, Patient A goes through a painstaking trial-and-error process of locating and downloading a provider’s machine-readable file. The file is often more than “two-clicks” away from a homepage, and as the Wall Street Journal investigation found, the file is not readily found by simply searching a mainstream search engine.¹²¹

Second, Patient A is confronted with thousands of rows of technical medical jargon accompanied by CPT codes, followed by an overwhelming expanse of dollar-signs, commas, and numbers.¹²² Startled at first, Patient A reasonably tries to conduct a search of the file, entering keyword phrases such as “knee surgery,” “ACL repair,” and “torn ACL,” to no avail. The medical jargon included in these files is incomprehensible to an untrained person.

Deterred but not defeated, Patient A consults a mainstream search engine to narrow down at least one CPT code for an ACL reconstruction. Over the course of their search, however, they discover the intricacies and variations of any particular ACL reconstruction. Assuming that Patient A determines that they want to replace their ACL with a cadaver ligament rather than a patellar tendon, they can pinpoint the corresponding CPT code.

Patient A at last revisits the machine-readable file, successfully conducts a search of the CPT code, and navigates to the provider’s gross charge, only to find that their payer-specific negotiated rate box is left blank or is not up-to-date, falsely misleading Patient A. But even in the highly unlikely chance that the payer-negotiated rate is available, accurate, and updated, Patient A would need to repeat this process of scavenging other machine-readable files from different providers to compare prices.

This extensive process is not likely what CMS envisioned. The intended direct impact of the Price Transparency Rule is to give more economic power to the patient by allowing them the chance to weigh the cost of care into their health care decision-making calculus. Unfortunately, the odds of achieving CMS’s price-shopping vision are incredibly slim. The machine-readable file, while perhaps useful to some researchers, academics, data aggregators, and app-developers, is a price-shoppers’ nightmare.

E. Shifting the Focus of Federal Price Transparency

Price transparency has been an ambitious political goal to combat health care inflation in the 2020s.¹²³ But, the existing empirical research indicates that the

¹²¹ See McGinty et al., supra note 105.
¹²² Current Procedural Terminology (CPT) can be understood as a numerical system of health care services.
¹²³ See discussion supra Sections I.C, II.C.
current laws may not be effective in lowering overall prices for consumers. Indeed, the large-scale study that examined the market impact of price transparency regulation in twenty-seven states found that hospitals may lower prices of their own volition, but the benefits are unlikely to reach consumers.\(^\text{124}\)

However, the benefits of more transparency to researchers and policymakers are hardly deniable. Pricing information from the machine-readable file has already been extracted and analyzed to strengthen existing research on price variation in health care and its potential uses in research go well beyond price variation.\(^\text{125}\) This data could be used to assess the impact of health care mergers on prices in different markets, especially smaller markets where mergers are more likely to have anticompetitive effects. But beyond the research benefits, the Price Transparency Rule in its current form is highly unlikely to fulfill its intended spirit to lower charges through market forces.

As a result, CMS may want to reconsider the current trajectory of the Price Transparency Rule and its decision to continue enforcement in light of potential alternatives. So far, the rollout has resulted in near-sweeping noncompliance, which has hardly improved between February and August of 2022, more than eighteen months after the effective date. And the No Surprises Act gives consumers a more seamless mechanism of obtaining out-of-pocket costs prior to receiving services than the Price Transparency Rule. The Act requires that hospitals provide uninsured consumers with a good faith estimate (GFE) and insured consumers with an Advanced Explanation of Benefits (AEOB) before receiving treatment.\(^\text{126}\) In concept, this requirement provides the same benefit to consumers as the Price Transparency Rule intended, notwithstanding whether the resulting impact on industry prices will be as desired. Furthermore, Health Level Seven International—the American National Standards Institute-accredited standards institute that creates the coding framework for APIs, including FHIR—has created an implementation guide to streamline GFEs and AEOBs to help hospitals achieve this functionality, easing the implementation burden on providers.\(^\text{127}\) In light of this alternative, CMS may consider adjusting its focus from enforcement of the Price Transparency Rule to consumer-promotion and enforcement of the No Surprises Act. In the event a consumer receives a medical bill in excess of their GFE or AEOB, they have dispute resolution rights and

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\(^{124}\) See Christensen et al., \textit{supra} note 48, at 2876 (2020) (“\text{"O\text{"}ur results suggest that, in response to PTR, providers do lower charges; however, they also decrease discounts such that these charge reductions do not lead to consumer savings."}.

\(^{125}\) See Linde & Egede, \textit{supra} note 28 (studying price variation); \textit{see also} discussion \textit{supra} Section I.B (describing the uses of data derived from state ACPDs).


evidence of an upcharge. Consumers can request GFEs and AEOBs from multiple providers and compare them in order to choose a hospital based on cost. This is exactly what the Price Transparency Rule intended on the consumer level.

Price shopping through the mechanisms of the No Surprises Act might benefit some cost-conscious consumers, but making price shopping available on an individual basis would not necessarily provide the broader, systematic benefits to researchers and policymakers as would having hospital standard charges completely public. Although the means of the Price Transparency Rule have been extraordinarily hard to comply with in many circumstances, the theories on the benefits of price transparency are sufficiently plausible for CMS not to abandon this concept altogether. As an alternate form of price transparency, for example, CMS should consider modeling an APCD based on one of the highly-regarded state APCDs discussed in Section I.B. These reliable APCDs have proven benefits for the state beyond allowing consumers to price shop and can be analyzed to draw on the impacts of health care mergers on price and quality of care, among many other things.

Data have shown that advertising the highest quality APCDs to consumers has increased use, but use has failed to lower costs. In light of this evidence, perhaps using an APCD model should lead to a more direct solution to controlling health care inflation by implementing, for example, direct price controls. This would be a groundbreaking shift in the way health care has historically been considered in the United States, as a commodity. But even in other countries with direct price control, scholars have demonstrated that directly regulating prices does not eliminate competition per se. Instead of lowering prices, providers rely on other metrics to drive competition, such as quality of care.

In any event, there is a growing gap between costs in the public and private sectors, with more than half of U.S. spending on health care coming from private sources. In the 2019 article, “It’s Still the Prices, Stupid,” authors from the first article concluded that lowering prices in the United States should start with private insurers and self-insured corporations because of this gap. This could be an area

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128 See discussion supra Section I.B.
129 See Murray et al., supra note 54 (including a scoring rubric as Appendix “A”).
130 Sunita M. Desai, Sonali Shambhu & Ateev Mehrotra, Online Advertising Increased New Hampshire Residents’ Use of Provider Price Tool But Not Use of Lower-Price Providers, 40 HEALTH AFFS. 521 (2021) (noting barriers that may prevent optimal consumer use of price information, including lack of knowledge of benefit plan, lack of incentive, and the uncertainty of price as a factor in selecting health care).
131 Berenson & Murray, supra note 4, at 27.
132 See It’s Still the Prices, Stupid, supra note 2, at 89 (“In 2000 the price differential between what public and private insurers paid was approximately 10 percent. The Medicare Payment Advisory Commission recently estimated that private insurers pay prices that are 50 percent higher than what Medicare pays.”).
133 Id.
for CMS to focus on while looking beyond price transparency.

CONCLUSION

The United States spends more than twice as much of its annual GDP on health care than other comparable industrialized countries. In light of increasing health care costs, an aging population and drained clinicians, controlling health care costs is at the top of America’s political priorities. Policymakers have turned to price transparency as the solution to controlling health care inflation. But the U.S. health care market, specifically the fragmented-payer market, makes complete and accurate price transparency a fool’s errand. The Price Transparency Rule, effective since January 2021, has had substantially underwhelming effects on increasing price transparency and lowering health care prices.

Other mechanisms exist, such as allowing a standards-based API (FHIR) to fulfill the Rule’s technical provision or focusing on providing GFEs and AEOBs through the No Surprises Act. But these solutions would likely only benefit individual consumers and lack the desired impact on industry-wide baseline prices.

The potential benefits of systematic price transparency to researchers and policymakers, however, are understated. For example, systematic data can be used to support future policy initiatives, including on topics such as mergers and acquisitions, quality of care initiatives, and price inflation. Future price transparency efforts should include appropriate legal safeguards to counteract potential anticompetitive behavior, such as “tacit collusion” of price inflation. State APCDs have proven to be effective tools by increasing consumer participation in the price shopping process, and have also provided meta data to researchers and policymakers to combat price inflation. The failures of the existing Price Transparency Rule indicate that the Department of Health and Human Services should consider a new approach to price transparency, perhaps using APCDs as a guide.