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2021 Health Price Transparency: Data Availability and Analysis

Starting on January 1, 2021 hospitals were required by the Centers of Medicare and Medicaid (CMS) to begin publishing price transparency data.[1] Hospitals are required to publish payer-specific negotiated rates for common services including at least 300 of the hospital's most shoppable services available to the general public in a machine-readable format. The rule defines the rates to include payer-specific negotiated rates, gross charges, and out-of-pocket cash prices. Compliance with the new regulation thus far has been sporadic.[2] However, Wakely has found that the hospital transparency data released to-date is able to provide some meaningful insights. This paper will outline Wakely's initial data collection and analysis[3] as well as our thoughts on the future of the hospital transparency data.

Availability of Data

Hospitals have released data to a varying degree of compliance with the CMS rule. Both the Kaiser Family Foundation[4] and the Health Cost Institute[5] released analyses describing accessing and compling the published data. Wakely encountered similar difficulties when collecting the data including: hospitals not posting data, data not including all required elements (e.g. not including all 300 shoppable services), lack of data standardization, and no central directory for the available published data.

Each hospital webpage must be navigated to find the available published files. When rates are published they can be available in difficult to use formats. CMS does not require a standard format (e.g. json or csv) or data dictionary dictacting which fields to include. In addition, some hospitals elect to only publish negotiated rates for diagnosis-related group (DRG) codes, while others only publish negotiated rates for Healthcare Common Procedure Coding System (HCPCS) or Current Procedural Terminology (CPT) service codes. These challenges make collecting a universal set of data difficult.

For the purpose of this paper we consider hospitals having provided available data if the hospital has published negotiated rates a list of shoppable services in a usable format. Wakely initially identified four states (IN, MI, OH, and TX) of interest to investigate the level and breadth of data available both in terms of substance and format. In these states Wakely initially identified 894 hospitals to investigate data availability. Wakely then narrowed the list of hospitals to only critical access and acute hospitals to focus

[1] https://www.cms.gov/newsroom/press-releases/cms-completes-historic-price-transparency-initiative
[2] https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2781019
[3] Please note that the data and information provided in this report is based on Wakely's data collection as of June, 2021. The published data that is available is subject to change as hospitals can post and revise data on an ongoing basis
[4] https://www.healthsystemtracker.org/brief/price-transparency-and-variation-in-u-s-health-services/
[5] https://healthcostinstitute.org/hcci-research/hospital-price-transparency-1

on hospitals that provide a broader range of services.[6] Of the 754 critical access and acute hospitals investigated, Wakely found that 336 of them, or slightly less than half, published negotiated rate data. Not all of the published data from the 336 hospitals included all of the 300 shoppable services or was provided in an accessible format.

Wakely has found that even when hospitals published negotiated rate data it was often incomplete, had quality issues, or was extremely difficult to access. For example, in some instances many of the 70 required CMS shoppable services were incomplete or completely missing. Other examples of poor data quality include fewer than 300 total services included, a large quantity of missing values, or the same rate being provided for all contracted payers. The Wakely team is currently creating a scoring system using these indicators to better compare the quality of the data provided between hospitals.

Despite the difficulties surrounding the consistency of the hospital transparency data, there are regional pockets of good data availability. Out of the four states that we investigated, Michigan had the greatest quantity of negotiated rate data. Within Michigan there were even higher levels of usable data than the state average, for example, in Detroit.

Wakely's Approach

Despite challenges in collecting data, we have found that there is enough hospital price transparency data that has been published to be used for relevant analytics. By taking variables that exist across all published data, we have begun to assemble a single dataset that can provide insight from a hospital system, insurer, or policy perspective. The data can allow users to select a service of interest and see negotiated price differences between hospitals and health plans. This allows for quick comparisons of cost across regional locations and by different categories.

In Figure 1 below, we show how a single service, in this case CPT code 80053: Comprehensive Metabolic Panel, has significant cost differences between three different hospital systems and between negotiated prices within a hospital. It should be noted that "Hospital 1" is the only hospital to report rates for all three health plans. For the purposes of this brief we have masked the names of both hospitals and payers. The hospitals displayed below are from the Detroit, MI area and reflect actual published rates.

[6] The most common types of hospitals that were not included were pediatric and psychiatric hospitals. In Wakely's investigation, these types of hospitals were less likely to release negotiated rate data than critical access and acute care hospitals.

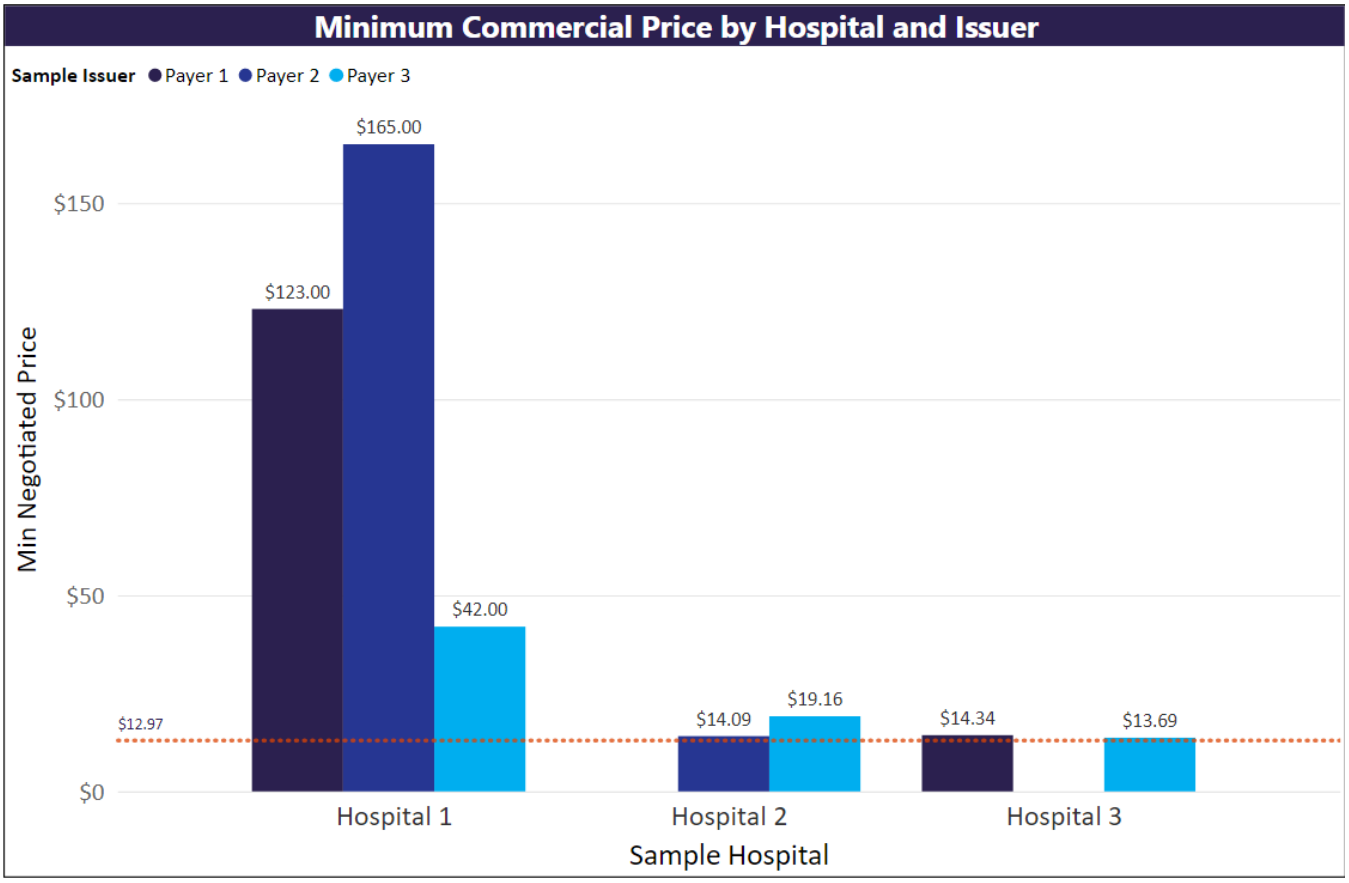

Figure 1: Minimum Commercial Price by Hospital and Issuer in Detroit for Service Code 80053

In addition to displaying a few sample rates in Figure 1, the red line highlights the weighted average of the Medicare payment amount[7] for the same service. In this case, we found the mean 2018 Medicare payment amount in the same Medicare payment locality as these hospitals to be $12.97. The reported minimum negotiated rate for "Hospital 1" with "Payer 2" is over ten times the Medicare payment amount in the same area. It is unclear if the reported value is erroneous,does not reflect the nuances of the contract that "Hospital 1" has with the payer, or if the service cost is just exceedingly high. Creating benchmarking tools, including Medicare payment amounts, to assess the reliability of the available data and better identify outliers has been an important step to creating meaningful analytics with the assembled data.

As can be seen below in Figure 2 for this service in a similar geographic area, there is significant variation in cost across hospitals and issuers. While not a novel finding, the new dataset will be able to identify the level of variation across services, which will allow users of the dataset to better understand pricing dynamics. The dots in the chart represent specific healthplans with the bars showing the range of prices.

[7] Wakely used the Medicare Provider Utilization and Payment Data: Physician and Other Supplier PUF CY2018 data to calculate a location specific benchmark: https://data.cms.gov/Medicare-Physician-Supplier/Medicare-Provider-Utilization-and-Payment-Data-Phy/hczc-ufy5

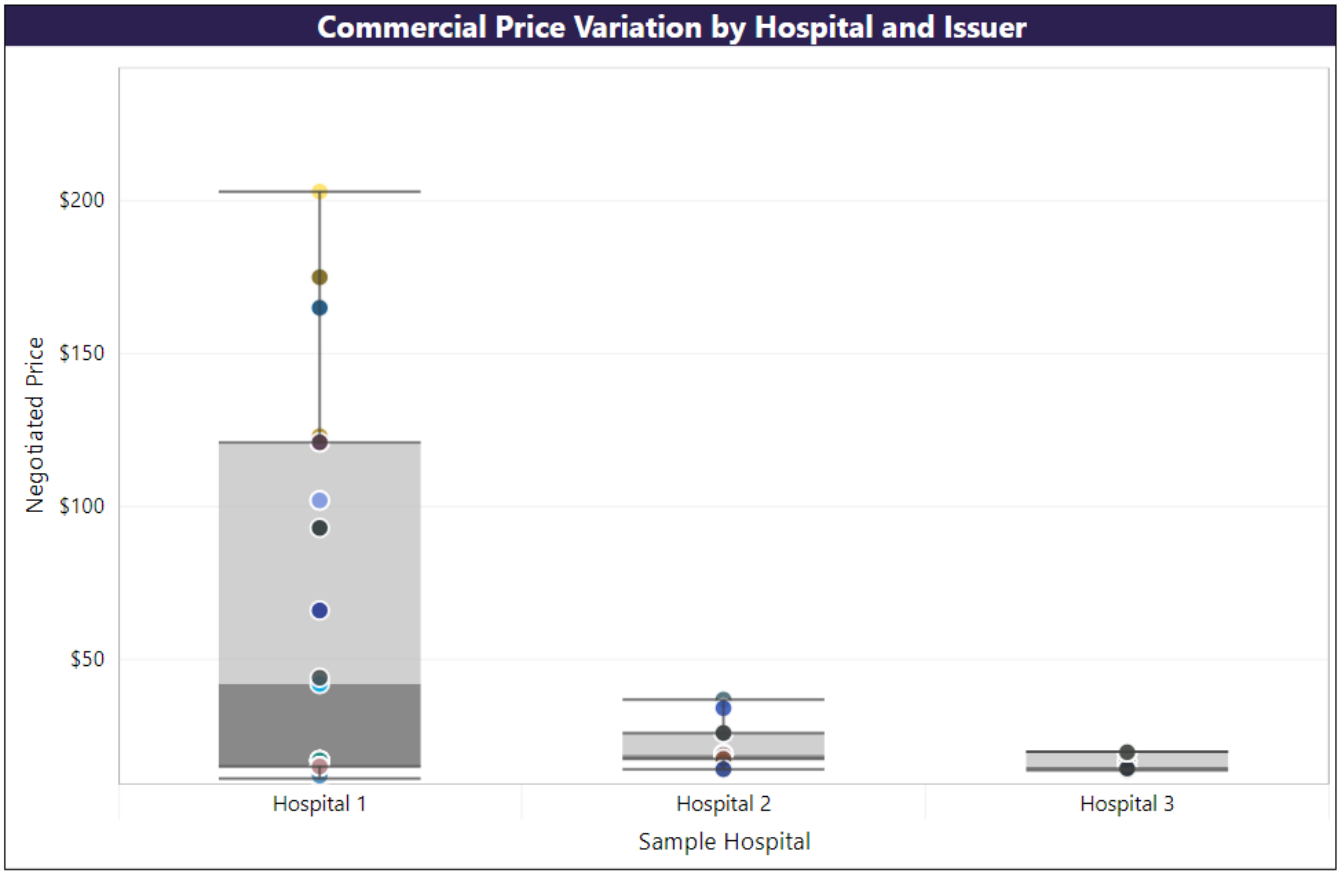

Figure 2: Commercial Price Variation by Hospital and all Issuers in Detroit for Service Code 80053

Finally, Wakely has been layering on additional data to allow for the review of negotiated cost comparisons, data availability, and geographical variation in price by additional categories. These additional categories include hospital ownership, hospital Medicare ratings, and geographic attribution.

Looking Forward

There are a number of reasons to think data quality and availability will improve in the coming months and years. Most investigations into the published hospital price transparency data, including our own, have focused on specific regions or on the largest hospitals and hospital systems. Continued collection of the available data will reveal additional published data. Over time it is also expected that providers will publish (or improve) their data both due to operational improvements and regulatory pressures. Recently, CMS released guidance on the use of website coding to hide transparency data from search engines which will likely help uncover some previously hidden or hard to find datasets.[8]

In addition to hospitals releasing data, health plans will be required to publish similar data sarting January 1, 2022. The ruling will also require health plans to publish online tools to assist their enrollees in

[8] https://www.carltonfields.com/insights/publications/2021/health-care-price-transparency-cms-says-no-hiding

navigating shoppable services by January 1, 2023. The CMS requirements will expand the number of shoppable services from 300 to 500 by 2023. The combination of the forthcominghealth plan data and the potential for improved hospital data provide an outlook for a robust picture of health price transparency.

Further improvements are necessary for the potential of the data to be fully realized. However, the hospital cost transparency data is a powerful tool even in its current state, and it is set to only get better.

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OUR STORY

Wakely's Expertise

We move fast to keep our clients ahead of the healthcare curve.

Broad healthcare knowledge. Wakely is experienced in all facets of the healthcare industry, from carriers to providers to governmental agencies. Our employees excel at providing solutions to parties across the spectrum.

Your advocate. Our actuarial experts and policy analysts continually monitor and analyze potential changes to inform our clients' strategies – and propel their success.

Deep data delivery. Because of Wakely's unique access to various data sources, we can provide insights that may not be available from other actuarial firms.

We are thought leaders. We go beyond the numbers.