# Mathematica Response to CMS Hospital Price Transparency Accuracy and Completeness Request for Information

#### Question #4

Are there external sources of information that may be leveraged to evaluate the accuracy and completeness of the data in the MRF? If so, please identify those sources and how they can be used.

## Response:

Although there is no single external gold standard against which to assess the quality of hospital price transparency (HPT) data, CMS can leverage both the Transparency in Coverage (TiC) data reported by health plans and the Medicare fee schedules to support assessments of the accuracy and completeness of data in a hospital's machine-readable file (MRF). Each plan's TiC data includes rates negotiated with the plan's in-network providers and allowed amounts for out-of-network providers for all items and services. CMS can leverage the TiC data by using these negotiated rates as a point of comparison. HPT rules require each hospital to report, among other standard charges, payer-specific negotiated charges. These prices in principle should align with the negotiated rates reported by health plans for the same item or service. In comparing the HPT and TIC negotiated rates for a given hospital, CMS can assess whether all expected payers are included in the hospital's MRF, the extent to which payer and hospital data agree on the range of billing codes for which negotiated prices are reported, and whether the amount of the negotiated rate is the same across the two data sources for each billing code reported.

The TiC data are an imperfect standard against which to assess the HPT data because different reporting standards apply to the two data sets, and, like the HPT data, the TiC data may contain errors. When prices reported by hospitals and payers for seemingly the same service do not align, this could reflect an inaccuracy in the HPT data. However, the discrepancy might exist because the hospital price reflects a slightly different set of services than the payer price. For example, the reported price for an outpatient procedure may or may not include ancillary services. Alternatively, the two prices could reflect different contract terms agreed to at different times, resulting in a more up-to-date set of prices in one source than the other. Finally, the discrepancy could be due to an error in the TiC data rather than the HPT data. For these reasons, the most effective monitoring strategy will focus less on identifying errors and missing values in specific billing codes and more on identifying hospitals with consistently significant deviations across payers and/or billing

codes; hospitals with consistent patterns of price discrepancies and incompleteness across services and/or payers could be assigned a higher probability of audit.

An additional limitation of the TiC data is that it is not required to include prices of Medicare Advantage plans and Medicaid managed care plans and therefore cannot be used to validate HPT data for those plans. In addition, the TiC data cannot be used to validate hospitals' gross charges and discounted cash prices, as plans are not required to report those data elements.

CMS may also leverage Medicare fee schedule rates as benchmarks when validating the HPT data. There is a well-established literature on the relative differences between Medicare rates and other types of insurance plans.\* Moreover, Medicare fee schedule rates are precisely defined and therefore not subject to the noise and potential errors of the TiC data. CMS could evaluate the extent to which hospital-reported rates for payers other than Medicare deviate from Medicare rates, comparing the results to expected deviations based on the literature. Although this approach cannot be used to ascertain whether a given hospital price is accurate, it will help uncover large, unexpected deviations across services and payers and is thus a useful tool to identify targets for audits.

\* Congressional Budget Office. The Prices That Commercial Health Insurers and Medicare Pay for Hospitals' and Physicians' Services. Congressional Budget Office. 2022.

Maeda JLK, Nelson L. How Do the Hospital Prices Paid by Medicare Advantage Plans and Commercial Plans Compare with Medicare Fee-for-Service Prices? Inquiry. 2018 Jan-Dec;55:46958018779654. doi: 10.1177/0046958018779654. PMID: 29888626; PMCID: PMC6050995.

#### Question #5

What specific suggestions do you have for improving the HPT compliance and enforcement processes to ensure that the hospital pricing data is accurate, complete, and meaningful? For example, are there any changes that CMS should consider making to the CMS validator tool, which is available to hospitals to help ensure they are complying with HPT requirements, so as to improve accuracy and completeness?

## Response:

CMS can improve compliance by implementing a consistent program of audits. Although proactively reviewing each data element of hospitals' machine-readable files (MRFs) is not practical given the size of the files, CMS could combine the use of random and targeted audits with a variety of strategies to efficiently enforce hospital price transparency (HPT) requirements. Specifically, CMS could leverage findings from its validation activities, focus

early efforts on addressing missing or incomplete data, and prioritize reviewing price data where the impact is likely to be highest.

To complement its responses to public complaints and incentivize improvements in data accuracy and completeness across all hospitals, CMS could begin auditing a random sample of hospitals, using a stratified design to efficiently select organizations to audit. Hospitals could be stratified by geography, number of beds, volume of services, history of public complaints or delays in compliance, or some combination of these. Because at least one study\* has found that smaller hospitals have lower compliance with completeness requirements, CMS could oversample such hospitals.

CMS could use its validation findings to identify outlier organizations with anomalous prices that point to potential inaccuracies. These might be organizations whose prices are consistently very high or very low or otherwise highly inconsistent—for example, exhibiting unusually large variation for substantially similar services—for a given set of services relative to peer organizations. Outliers could also be identified through comparisons with the TiC data. CMS could then conduct targeted audits of identified outliers. Targeted audits could also be triggered by stakeholder complaints, either in combination with outlier- or near-outlier status or based on the complaint alone. Further standardizing the reporting and format requirements for the data in the MRF will likely be important to enabling the most meaningful cross-entity comparisons.

Given that missing and incomplete data has been the most frequently identified deficiency in CMS enforcement actions to date, CMS could initially prioritize validating the completeness of hospitals' pricing data. The relatively lower level of effort required to verify completeness or assess the potentially inappropriate use of "n/a" for services commonly furnished in most hospitals could result in a higher relative return on investment when compared with verifying the accuracy of published prices.

Another strategy for maximizing efficiency and return on investment would be to prioritize specific sets of services for review, such as those that are typically expensive and frequently furnished. Ensuring the accuracy of these prices would help maximize the impact of improved accuracy on future price negotiations by health plans and employers as well as their ability to develop cost-efficient networks of health care providers.

\* Jiang JX, Polsky D, Littlejohn J, Wang Y, Zare H, Bai G. Factors Associated with Compliance to the Hospital Price Transparency Final Rule: a National Landscape Study. J Gen Intern Med. 2022 Nov;37(14):3577-3584. doi: 10.1007/s11606-021-07237-y. Epub 2021 Dec 13. PMID: 34902095; PMCID: PMC8667537.