

A RESPONSE TO THE CY27 OPPTS PROPOSED RULE REQUEST FOR INFORMATION REGARDING STRENGTHENING THE STANDARDIZATION AND COMPARABILITY OF HOSPITAL PRICE TRANSPARENCY (HPT) DATA

Provided by: Cleverley + Associates

We appreciate CMS's efforts to improve the transparency, comparability, and usability of Hospital Price Transparency data. Based on our experience modeling thousands of hospital-payer contracts and producing Machine-Readable Files for hundreds of hospitals, we believe the greatest opportunity for improvement lies in enhancing existing transparency tools rather than expanding reporting requirements or increasing administrative burden. Our recommendations focus on improving how reimbursement methodologies and reimbursement outcomes are communicated to consumers, employers, researchers, and policymakers.

Our answers to the RFI describe the following key themes:

- 1. Build Upon Existing Transparency Tools Rather Than Creating New Data Elements**
CMS should enhance algorithm descriptions and allowed amount reporting, rather than continually expanding the MRF schema with new reporting fields.
- 2. Complexity Should Be Communicated, Not Encoded**
Rather than attempting to encode every contractual provision into discrete data elements, CMS should focus on standardized terminology, clear reimbursement anchor points, and reimbursement outcomes.
- 3. Standardize Algorithm Descriptions Through a CMS Data Dictionary**
CMS should establish a standardized reimbursement data dictionary and formatting conventions for algorithm descriptions so that common contract concepts are communicated consistently while remaining machine-readable.
- 4. Allowed Amount Reporting Is the Most Meaningful Transparency Data**
Allowed amounts provide the clearest picture of actual reimbursement and should be reported consistently using MS-DRG and primary APC claim groupers to improve comparability.
- 5. Consumer Transparency Is Best Delivered Through Technology, Not Larger Files**
Consumers are best served through Price Estimator Tools and payer comparison tools that translate hospital and payer transparency data into personalized estimates rather than increasingly large and complex static files.

In the following pages, we share more information regarding these themes. Thank you again for engaging stakeholders on these important questions.

MRF QUESTIONS: INCREASING TRANSPARENCY OF OUTLIER PROVISIONS AND ADDITIONAL CONTRACT TERMS

1. What information is needed for users of the MRF to fully understand contract terms related to outlier payments, stop-loss, rate-tiering, carve-outs, and other adjustments that occur across hospital items and services?

We appreciate CMS's efforts to improve the transparency, consistency, and usability of Hospital Price Transparency (HPT) data. **We believe CMS has already established two critical transparency tools that help users understand reimbursement: algorithm descriptions and allowed amount reporting.**

Together, these elements provide both the context and the outcome of reimbursement. Algorithm descriptions allow hospitals to communicate the key components of reimbursement methodologies, while allowed amount reporting demonstrates how those methodologies ultimately translate into reimbursement. **Rather than creating additional reporting fields within the MRF schema, we believe CMS can achieve meaningful improvements in transparency by enhancing these existing elements, enabling users to more consistently understand the contractual drivers of reimbursement and the resulting payment outcomes across hospitals and payers.**

Algorithm Description Enhancements – CMS Data Dictionary & Standard Display Formatting

The elements that CMS references in the question can be adequately conveyed within the algorithm description field, however, we believe there is an opportunity to improve the consistency and usability of algorithm descriptions to address concerns. Rather than creating a growing number of new data elements, CMS could establish a standardized data dictionary of reimbursement concepts, definitions, and formatting conventions that hospitals could leverage when constructing algorithm descriptions. In our experience modeling thousands of hospital-payer contracts, many reimbursement concepts are described differently across payers despite representing similar underlying payment methodologies. Standardizing terminology and presentation would improve consistency and machine readability while preserving the significant benefit of viewing these concepts together within a holistic algorithm description. This approach allows users to better understand how reimbursement provisions interact across an entire claim or episode of care rather than reviewing a collection of disconnected data elements.

By way of example, our firm has developed and maintained a reimbursement data dictionary containing approximately 350 reimbursement concepts and data elements identified through the analysis and modeling of thousands of hospital-payer contracts. We leverage this framework when producing Machine-Readable Files for hundreds of hospitals, allowing common reimbursement concepts to be represented consistently regardless of payer-specific terminology. These terms are then incorporated into structured algorithm descriptions using standardized naming conventions and machine-readable formatting. We believe CMS could build upon a similar approach by establishing an industry-supported data dictionary of reimbursement concepts, definitions, and formatting standards for algorithm descriptions. **Importantly, we believe there is substantial value in retaining these standardized elements within a holistic algorithm description rather than separating them into numerous individual data fields. Reimbursement methodologies are applied collectively to inpatient and outpatient claims, and presenting these concepts together allows users to better understand how the various payment provisions interact to determine reimbursement.**

Consistent with this approach, we create a single inpatient algorithm description and a single outpatient algorithm description for each payer-plan combination, which mirrors how contracts are structured, adjudicated, and ultimately reflected in allowed amount reporting. This approach promotes consistency, transparency, and machine readability without requiring the creation of an ever-expanding set of reporting fields. Below is an example of an inpatient and outpatient algorithm description and how standard terms and formatting could be used to holistically convey reimbursement provisions by an end-user and parsed consistently through machine-readability.

EXAMPLE OF ALGORITHM DESCRIPTION USING STANDARD TERMS & CONSTRUCTION:

Step One: MRF Producers would consult a CMS “Algorithm Component Data Dictionary”

In our case example, the MRF Producer would find the following terms/definitions that describe the different algorithm components within their payer contracts. Below are the applicable inpatient and outpatient algorithm components selected from the larger list for this payer/plan.

INPATIENT ALGORITHM DESCRIPTION DATA DICTIONARY – RELEVANT TERMS FOR IP EXAMPLE

PATIENT TYPE	ALGORITHM COMPONENT NAME	ALGORITHM COMPONENT DESCRIPTION
IP	Stop Loss	A fixed dollar threshold that must be greater than in order for Inpatient services to switch from one payment method to another. Payment provided on total charges (1st dollar).
IP	Lesser Than Charges paid at %	The percent of billed charges the payer has agreed to pay if the amount is below the threshold amount.
IP	MSDRG Base Rate	A flat dollar amount to be multiplied by current CMS MS-DRG relative weights to determine payment.
IP	C-Section 4 day stay-Case Rate	A flat dollar amount the payer has agreed to pay for the entire stay (or first 4 days) in which the mother delivers via Caesarean section and stays for 4 days.
IP	Normal vag. Del. 2 day stay-Case Rate	A flat dollar amount the payer has agreed to pay for the entire stay (or first 2 days) in which the mother delivers via normal vaginal delivery and stays for 2 days.
IP	Normal Newborn-Per Diem	A flat dollar amount the payer has agreed to pay per day for inpatient services for a normal newborn.
IP	Lower Level Neonate-Per Diem	A flat dollar amount the payer has agreed to pay per day for inpatient services for a lower level neonate.
IP	Higher Level Neonate-Per Diem	A flat dollar amount the payer has agreed to pay per day for inpatient services for a higher level neonate.
IP	Severe Level Neonate-per diem	A flat dollar amount the payer has agreed to pay per day for inpatient services for a severe level neonate.
IP	IP High Cost Drugs (%BC)	The percent of billed charges the payer has agreed to pay for High Cost Drugs that were administered during an inpatient stay.
IP	Bariatric Surgery-Case Rate	A flat dollar amount the payer has agreed to pay for the entire inpatient stay for bariatric surgery.
IP	Trauma-Add On	A flat dollar amount the payer has agreed to payer for Trauma services.

OUTPATIENT ALGORITHM DESCRIPTION DATA DICTIONARY – RELEVANT TERMS FOR OP EXAMPLE

PATIENT TYPE	ALGORITHM COMPONENT NAME	ALGORITHM COMPONENT DESCRIPTION
OP	Lesser Than Charges paid at %	The percent of billed charges the payer has agreed to pay if the amount is below the threshold amount.
OP	OP Surgery Group (\$)	A flat dollar amount the payer has agreed to pay for outpatient surgery, but HCPCS Group assignment is not known.
OP	OP Surg. Ungroupable (%BC)	The percent of billed charges the payer has agreed to pay for a payer specified ungroupable surgery.
OP	Cardiac Cath (\$)	A flat dollar amount the payer has agreed to pay for all services related to an outpatient cardiac catheterization.
OP	PTCA (\$)	A flat dollar amount the payer will pay for an outpatient Percutaneous Transluminal Coronary Angioplasty (PTCA) procedure.
OP	Observation (%BC)	The percent of billed charges the payer has agreed to pay for an observation admission. Observation is usually defined as a stay of less than 24 hours.
OP	ED Level 1--99281 (\$)	A flat dollar amount the payer has agreed to pay for level 1 ED services.
OP	ED Level 2--99282 (\$)	A flat dollar amount the payer has agreed to pay for level 2 ED services.
OP	ED Level 3--99283 (\$)	A flat dollar amount the payer has agreed to pay for level 3 ED services.
OP	ED Level 4--99284 (\$)	A flat dollar amount the payer has agreed to pay for level 4 ED services.
OP	ED Level 5--99285 (\$)	A flat dollar amount the payer has agreed to pay for level 5 ED services.
OP	Critical Care (%BC)	The percent of billed charges the payer has agreed to pay for critical care services.
OP	Electrophysiology Ablation (\$)	A flat dollar amount the payer has agreed to pay for electrophysiologic ablation.
OP	Radiology Fee Schedule	The payer has agreed to pay for outpatient radiological services according to a pre-determined flat dollar amount, depending on the service provided.
OP	Laboratory Fee Schedule	The payer has agreed to pay for outpatient laboratory services according to a pre-determined flat dollar amount, depending on the service provided.
OP	Peritoneal Dialysis, CAPD, and CCPD (%BC)	The percent of billed charges the payer has agreed to pay for peritoneal dialysis, including Continuous Ambulatory (CAPD) and Continuous Cycling (CCPD).
OP	Occupational Therapy (%BC)	The percent of billed charges the payer has agreed to pay for outpatient occupational therapy services.
OP	Physical Therapy (%BC)	The percent of billed charges the payer has agreed to pay for outpatient physical therapy services.
OP	Speech Therapy (%BC)	A percentage of billed charges the payer has agreed to pay for speech therapy services.
OP	Mental Health (\$)	A flat dollar amount the payer has agreed to pay for outpatient mental health services.
OP	OP High Cost Drugs (\$)	A flat dollar amount the payer has agreed to pay for high cost drugs on an outpatient visit.
OP	Other Outpatient Implant (%BC)	The percent of billed charges the payer has agreed to pay for other Prosthetics/Implants/Devices during an outpatient visit.
OP	Trauma (%BC)	The percent of billed charges the payer has agreed to pay for outpatient trauma treatment.
OP	All Other OP (%BC)	The percent of billed charges the payer has agreed to pay for all unspecified outpatient services.

Step Two: MRF Producers would pull contract values and supporting fee schedules for applicable components

In our case example, the MRF Producer would identify the values and any accompanying fee schedules for all appropriate components.

Step Three: MRF Producers would encode values into the MRF algorithm description field using the referenceable algorithm component name and consistent formatting structure

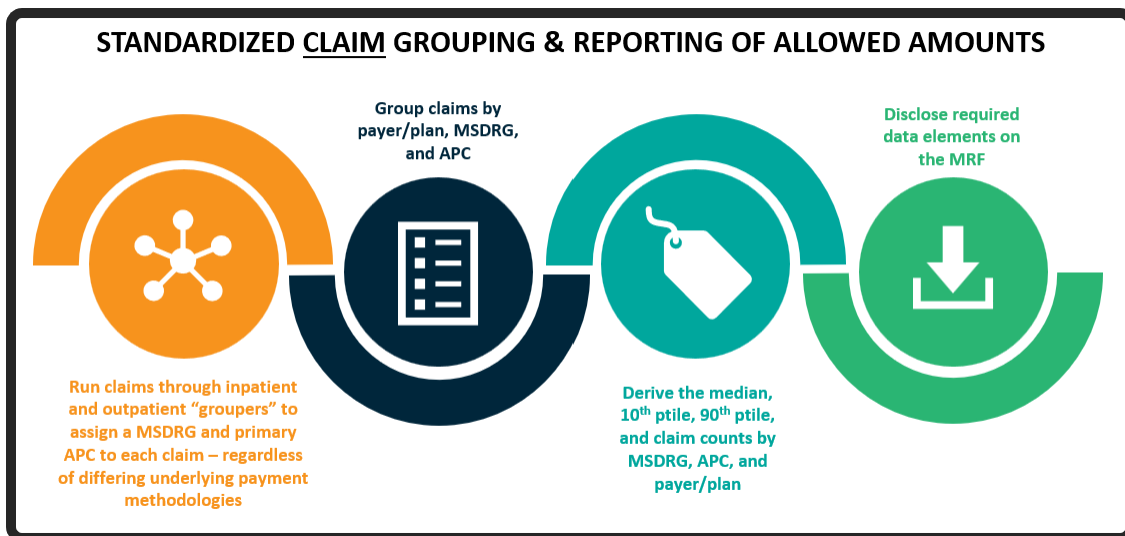
In our case example, the MRF Producer would encode values and supporting fee schedules using the following encoding key. The result would be an algorithm description that would contain consistent industry terms with the ability to parse data efficiently through a machine-readable format.

ALGORITHM DESCRIPTION ENCODING KEY
KEY: [] – Brackets denote individual algorithm components for machine-readability and parsing [Standardized Term] – Standardized terms from a CMS data dictionary would ensure consistent reporting [%] – Percentage symbol would indicate this algorithm component has a percent-of-charge structure [\$] – Dollar symbol would indicate this algorithm component has a dollar value structure [:Value] – Corresponding values to symbols above or FEE SCHEDULE to indicate that a corresponding list of codes and values is found within the MRF but are a component of the overall claim algorithm
RESULTING MACHINE-READABLE ALGORITHM DESCRIPTIONS
standard_charge negotiated_algorithm
INPATIENT ALGORITHM DESCRIPTION ILLUSTRATION
[Stop Loss: Total Charges > 500000 Total % of Charge: 48.50] [Lesser Than Charges paid at %: 100] [MSDRG Base Rate: FEE SCHEDULE] [C-Section 4 day stay-Case Rate: 14500 Days: 4 Additional Days: 2500] [Normal vag. Del. 2 day stay-Case Rate: 8000 Days: 2 Additional Days: 2500] [Normal Newborn-Per Diem: 1400] [Lower Level Neonate-Per Diem: 2300] [Higher Level Neonate-Per Diem: 6500] [Severe Level Neonate-per diem: 7800] [IP High Cost Drugs (%BC): 48.50] [Bariatric Surgery-Case Rate: FEE SCHEDULE] [Trauma-Add On: 7700]
OUTPATIENT ALGORITHM DESCRIPTION ILLUSTRATION
[Lesser Than Charges paid at %: 100] [OP Surg. Group (\$): FEE SCHEDULE] [OP Surg. Ungroupable (%BC): 58.2] [Cardiac Cath (\$): 13999] [PTCA (\$): 44712] [Observation (%BC): 55.3 Maximum Reimbursement 4000] [ED Level 1--99281 (\$): 768] [ED Level 2--99282 (\$): 1169] [ED Level 3--99283 (\$): 2076] [ED Level 4--99284 (\$): 3030] [ED Level 5--99285 (\$): 3689] [Critical Care (%BC): 55.3] [Electrophysiology Ablation (\$): 14756] [Radiology Fee Schedule: FEE SCHEDULE] [Laboratory Fee Schedule: FEE SCHEDULE] [Peritoneal Dialysis, CAPD, and CCPD (%BC): 55.3] [Occupational Therapy (%BC): 56.3] [Physical Therapy (%BC): 56.3] [Speech Therapy (%BC): 55.3] [Mental Health (\$): 911] [OP High Cost Drugs (\$): FEE SCHEDULE] [Other Outpatient Implant (%BC): 0 Charge Threshold 1000 (%BC): 42.3] [Trauma (%BC): 55.3] [All Other OP (%BC): 55.3]

These algorithm descriptions would be accompanied by allowed amount reporting – also at the claim level – to show how these terms interact during patient encounters. In order to display this information consistently, we offer the following recommendation for enhancing allowed amount reporting.

Allowed Amount Reporting Enhancements – Standardized Value Reporting Using Claim Groupers

We continue to believe that users derive the greatest value from understanding the resulting reimbursement outcome from the numerous contracting methods and terms. For consumers, employers, researchers, and other stakeholders seeking to understand reimbursement, allowed amount reporting provides the most meaningful information because it reflects how services were actually reimbursed after all applicable contractual provisions have been applied. **We therefore recommend that CMS enhance comparability by standardizing how allowed amounts are reported, including the use of common claim grouping methodologies such as MS-DRGs for inpatient claims and primary APCs for outpatient claims. Once claims were assigned a MS-DRG or primary APC (based on highest weighted HCPCS on the outpatient claim), the median, 10th percentile, 90th percentile, and claim counts would be derived and reported by payer/plan. Utilizing this common approach, values could be consistently reported and compared. It is important to note that these groupers would serve solely as a common reporting framework for reimbursement outcomes and would remain agnostic to the underlying contract methodology. Algorithm descriptions would continue to show underlying contracted rates and terms. The impact of this approach is clear: holistic algorithm descriptions that apply to an inpatient or outpatient claim coupled with corresponding claim-level allowed amounts that demonstrate reimbursement variation across a patient population.**



To illustrate, we have taken our algorithm description case example and added the allowed amount reporting fields for an inpatient and outpatient “row” of data for the specific payer/plan.

INPATIENT ALLOWED AMOUNT USING STANDARDIZED MS-DRG GROUPING –

ONE "ROW" OF PAYER/PLAN DATA (WITH STANDARDIZED ALGORITHM DESCRIPTION FROM PREVIOUS EXAMPLE)

MRF DATA ELEMENT	RESULTING VALUE
description	Vaginal Delivery Without Sterilization Or D&C Without Cc/Mcc
code 1	807
code 1 type	MS-DRG
billing_class	Facility
setting	inpatient
payer_name	Payer A
plan_name	All Commercial Plans
standard_charge negotiated_algorithm	[Stop Loss: Total Charges > 500000 Total % of Charge: 48.50] [Lesser Than Charges paid at %: 100] [MSDRG Base Rate: FEE SCHEDULE] [C-Section 4 day stay-Case Rate: 14500 Days: 4 Additional Days: 2500] [Normal vag. Del. 2 day stay-Case Rate: 8000 Days: 2 Additional Days: 2500] [Normal Newborn-Per Diem: 1400] [Lower Level Neonate-Per Diem: 2300] [Higher Level Neonate-Per Diem: 6500] [Severe Level Neonate-per diem: 7800] [IP High Cost Drugs (%BC): 48.50] [Bariatric Surgery-Case Rate: FEE SCHEDULE] [Trauma-Add On: 7700]
median_amount	7750
10th_percentile	4995
90th_percentile	10350
count	121
standard_charge methodology	other

OUTPATIENT ALLOWED AMOUNT USING STANDARDIZED APC GROUPING –

ONE "ROW" OF PAYER/PLAN DATA (WITH STANDARDIZED ALGORITHM DESCRIPTION FROM PREVIOUS EXAMPLE)

MRF DATA ELEMENT	RESULTING VALUE
description	Level 4 Type A ED Visits
code 1	5024
code 1 type	APC
billing_class	facility
setting	outpatient
payer_name	Payer A
plan_name	All Commercial Plans
standard_charge negotiated_algorithm	[Lesser Than Charges paid at %: 100] [OP Surg. Group (\$): FEE SCHEDULE] [OP Surg. Ungroupable (%BC): 58.2] [Cardiac Cath (\$): 13999] [PTCA (\$): 44712] [Observation (%BC): 55.3 Maximum Reimbursement 4000] [ED Level 1--99281 (\$): 768] [ED Level 2--99282 (\$): 1169] [ED Level 3--99283 (\$): 2076] [ED Level 4--99284 (\$): 3030] [ED Level 5--99285 (\$): 3689] [Critical Care (%BC): 55.3] [Electrophysiology Ablation (\$): 14756] [Radiology Fee Schedule: FEE SCHEDULE] [Laboratory Fee Schedule: FEE SCHEDULE] [Peritoneal Dialysis, CAPD, and CCPD (%BC): 55.3] [Occupational Therapy (%BC): 56.3] [Physical Therapy (%BC): 56.3] [Speech Therapy (%BC): 55.3] [Mental Health (\$): 911] [OP High Cost Drugs (\$): FEE SCHEDULE] [Other Outpatient Implant (%BC): 0 Charge Threshold 1000 (%BC): 42.3] [Trauma (%BC): 55.3] [All Other OP (%BC): 55.3]
median_amount	3030
10th_percentile	2250
90th_percentile	3200
count	67
standard_charge methodology	other

In summary, we believe CMS can further strengthen transparency by building upon the tools already available within the MRF. Specifically, we recommend: (1) enhancing algorithm descriptions through a standardized data dictionary, common terminology, and consistent formatting conventions, and (2) enhancing allowed amount reporting through standardized claim grouping methodologies such as MS-DRGs and primary APCs. Together, these improvements would increase transparency, machine readability, and comparability while preserving the flexibility needed to accurately communicate complex reimbursement methodologies without requiring the creation of numerous additional reporting fields.

2. How are hospitals currently reporting contract terms for outlier payments, stop-loss, rate-tiering, carve outs or other adjustments in the MRFs? Are the current formats sufficient for conveying these and other important contract terms? If not, what changes to the current formats, such as separate data elements, would be advised to accommodate the disclosure of such contract terms in a standard manner?

Today, hospitals commonly report these concepts through a combination of negotiated charge information, algorithm descriptions, charge methods, fee schedules where applicable, and allowed amount reporting. The algorithm description field is particularly important because it allows hospitals to communicate reimbursement concepts that cannot be reasonably represented through existing structured data elements alone. The algorithm description field also allows hospitals the ability to convey reimbursement methodology holistically rather than as isolated contract components.

We continue to agree with CMS's prior recognition that reimbursement algorithms cannot realistically be translated into a finite set of standardized reporting fields without creating excessive burden and complexity. In fact, CMS appropriately acknowledged this challenge in prior rulemaking when it concluded that requiring hospitals to fully encode reimbursement algorithms would be unwieldy and instead permitted narrative algorithm descriptions.

The current format is generally sufficient to accommodate the variation in contract structures that exist across payers and markets. However, there are opportunities to improve consistency in how those arrangements are described in the MRF. **As mentioned in our response to the previous question, rather than creating a large number of new data elements, CMS should establish a standard algorithm component data dictionary and formatting requirements.** CMS may also benefit from reviewing the approaches used by high-volume MRF producers, as consistent patterns and reimbursement concepts already exist across many hospital files. Our firm would be happy to assist in this development.

3. Do outlier and carve-out contract terms typically apply to individual services, a category of services, or across the entire contract? Should rate-tiering standard charge information be reflected in the payer-specific negotiated charge?

There is no single answer to this question because reimbursement arrangements vary considerably across contracts. Outlier provisions and carve-outs may apply to individual services, categories of services, service lines, inpatient reimbursement methodologies, outpatient reimbursement

methodologies, or broader portions of a contract. In many instances, these provisions are layered within a larger reimbursement algorithm rather than functioning independently.

This variability highlights the importance of flexible reporting requirements for specific contract provisions. A given contract term may operate differently from payer to payer and even between reimbursement methodologies within the same contract. We therefore believe reporting should remain sufficiently flexible to communicate the context in which these provisions operate.

We believe there is value in maintaining distinct inpatient and outpatient algorithm descriptions. Aligning contract descriptions to the setting in which claims are adjudicated improves user understanding and more closely reflects how reimbursement actually occurs.

With respect to rate-tiering, we believe allowed amount reporting already provides users with the information most relevant to understanding reimbursement because it reflects the cumulative effect of rate-tiering and all other contractual payment provisions after they have been applied to actual claims. Although disclosure of rate-tiering methodologies may provide additional context, these arrangements are negotiated and applied differently across payer contracts. As a result, developing a comprehensive framework to encode the full range of rate-tiering methodologies would be administratively burdensome and potentially difficult for users to interpret consistently. **We therefore believe the greatest value comes from standardized reporting of reimbursement outcomes through allowed amounts, supplemented by standardized descriptions of key reimbursement concepts where appropriate.**

4. What additional contracting or payment adjustments affect payer-specific negotiated charges at the item or service level, across items and services, or at the contract level, and should that information be encoded in the current data elements provided? If not, what changes to the current formats would be advised to capture this information in a standard manner?

The number of contractual methodologies that may affect reimbursement is extensive and continually evolving. Examples include multiple procedure discounting methodologies, hierarchy provisions, code-specific payment adjustments, service-line carve-outs, stop-loss provisions, surgical grouping logic, claim-level eligibility criteria, relative-weight methodologies, payer-specific grouping systems, and numerous other reimbursement adjustments.

Importantly, many of these methodologies are supported by detailed underlying logic involving procedure codes, diagnosis codes, reimbursement factors, grouping methodologies, and payer-specific conditions. Some also rely on proprietary rules, classifications, and methodologies that may not be available to hospitals in a standardized reporting format.

As we noted in our prior comments to CMS, we have not observed reimbursement methodologies that can be adequately described through a limited set of payment categories without considering numerous additional terms and conditions. Even seemingly straightforward payment methodologies such as fee schedules, per diem payments, and case rates almost always operate alongside carve-outs, exclusions, thresholds, stop-loss provisions, and other reimbursement modifiers.

For this reason, we caution against attempts to continuously expand reporting requirements to encompass every possible contractual adjustment. Instead, as outlined in our earlier response, **CMS should focus on establishing greater consistency around core reimbursement concepts – such as an algorithm component data dictionary – while continuing to rely on algorithm descriptions and allowed amount reporting to communicate how reimbursement operates in practice.** This approach supports clearer and more comparable MRF reporting without continually changing the MRF file schema and/or data elements.

MRF QUESTIONS: STANDARDIZATION TO ENHANCE UTILITY OF THE MRF

1. Are there challenges in parsing and categorizing the free text fields when analyzing MRFs? If so, what parameters or requirements would facilitate parsing and categorizing free text fields?

Yes. Variations in terminology, formatting, abbreviations, and reimbursement descriptions create challenges for researchers and developers attempting to perform large-scale MRF analysis. However, we do not believe eliminating all free-text fields is the appropriate solution.

Specifically for the “Negotiated Algorithm” field, we continue to agree with CMS’s prior recognition that reimbursement algorithms cannot realistically be represented through a finite number of structured reporting elements – our firm alone has a repository of approximately 350 algorithm components. **Instead, CMS should consider focusing on creating greater consistency within algorithm descriptions by establishing standardized algorithm component data dictionary and required formatting conventions. As illustrated in our previous example, this standardization would permit machine readability and parsing within the algorithm description text field.**

2. Are there categories of information or topics consistently included in free text fields that may be standardized through the addition of new data elements? If so, what topic areas should be considered?

Generally, no. Specific to the “Negotiated Algorithm” field, while certain reimbursement concepts, such as outlier provisions and lesser-of methodologies, appear across many hospital-payer contracts, we do not believe the addition of new data elements is the most effective approach to improving transparency or usability. Reimbursement methodologies are often composed of multiple interrelated provisions that work together to determine payment. As a result, the value of algorithm descriptions is that they communicate how reimbursement components interact collectively rather than as isolated concepts.

We therefore recommend caution in expanding the number of required discrete fields within the MRF. Instead, we believe CMS could achieve greater consistency and usability by establishing standardized terminology, definitions, and formatting conventions that hospitals could utilize within existing algorithm descriptions. A common data dictionary and structured presentation format would allow recurring reimbursement concepts to be communicated consistently across hospitals while preserving the important context of how those concepts operate together within a reimbursement methodology.

In our view, standardization efforts should focus on promoting consistency in terminology and presentation rather than creating separate data elements for individual contract provisions. This approach would improve machine readability, transparency, and comparability while avoiding additional

schema complexity and preserving the holistic view of reimbursement methodologies that algorithm descriptions currently provide.

3. Are there additional contract methodologies that should be reflected as valid values in the MRF, outside the current valid values of fee schedule, capitation, per diem, case rate and other?

Our experience suggests that CMS may wish to simplify, rather than expand, the current list of reimbursement methodology categories. In practice, most reimbursement arrangements generally fall into one of three broad categories:

- Percentage-of-charge reimbursement.
- Fee schedule reimbursement (especially for employed professionals as a standalone method).
- Algorithm-based reimbursement methodologies.

Importantly, fee schedules, per diem methodologies, and case rates are often not standalone reimbursement systems but rather components within broader reimbursement methodologies. In the thousands of hospital-payer contracts we have reviewed and modeled, these methodologies frequently coexist with carve-outs, stop-loss provisions, lesser-of provisions, hierarchy rules, service-specific adjustments, and other payment modifiers that collectively determine reimbursement. As a result, identifying a contract solely as a fee schedule, per diem, or case rate methodology may not fully convey how reimbursement is actually determined.

For this reason, we believe CMS should consider replacing the current "other" category with an explicit "algorithm" category and evaluating whether some of the existing reimbursement methodology categories remain necessary for MRF reporting. Such an approach would more accurately reflect how commercial reimbursement arrangements are commonly reported in practice, acknowledge the prevalence of algorithm-based reimbursement methodologies, and improve users' understanding of payer-specific negotiated charge reporting. This approach would also better align with CMS's previous recognition that many reimbursement methodologies cannot be adequately represented through a limited set of standardized payment categories, while avoiding any implication that the underlying contract structures should be standardized.

4. Should CMS require more structured reporting of payer, plan, product, network, and employer (as applicable) information across hospital MRFs, and if so, which elements should be required? Are there existing identifiers for payers and plans, to which hospitals have access, that should be incorporated in the MRF?

Additional consistency in payer identification would improve comparability across hospital MRFs. However, we caution against requiring increasingly granular reporting at the employer or subgroup level if such requirements fragment reimbursement arrangements that share common contract methodologies.

We continue to support CMS exploring the development of a national payer identifier framework or payer reference structure that would allow hospitals to consistently identify payer organizations and products. Such a framework could significantly improve comparability across MRFs while avoiding unnecessary reporting complexity.

Where multiple products share the same underlying contracted reimbursement arrangement, hospitals should retain the ability to report those products together. This approach is especially important in ensuring adequate claim volume for allowed amount reporting.

5. What additional information should we consider to enhance the utility and comparability of the MRF data?

As previously discussed, we believe that a **standardized data dictionary of algorithm components and formatting requirements for display within the text field could significantly enhance the utility and comparability of MRF data.**

In addition, we continue to believe that the greatest opportunity to improve the utility, consistency, and comparability of MRF data lies not in expanding the number of reported contract elements, but in standardizing how reimbursement outcomes are reported.

As noted in our prior comments, allowed amounts represent the most complete and meaningful representation of payer-specific negotiated reimbursement because they incorporate applicable contract terms, reimbursement methodologies, payment conditions, and contractual adjustments as applied to actual claims. They provide a more comparable basis for analysis and a more meaningful representation of how reimbursement actually occurs, without requiring users to interpret every underlying contract provision.

To improve consistency across hospitals, CMS should consider standardizing the grouping logic used for allowed amount reporting. Specifically:

- **Inpatient allowed amounts should be grouped and reported by MS-DRG.**
- **Outpatient allowed amounts should be grouped and reported using a CMS-based methodology such as primary APC assignment based on the highest weighted HCPCS on the patient claim.**

Importantly, these groupers would serve only as a standardized framework for aggregating and reporting claim reimbursement within the allowed amount fields and would not dictate or alter the underlying reimbursement methodology. Whether a payer contract reimburses through a percentage of charge contract or an algorithm-based methodology, the resulting allowed amounts could still be grouped and reported consistently using common claim groupers. In this way, the grouping methodology would remain agnostic to the underlying contract structure while significantly improving comparability across hospitals and payers.

These grouping methodologies are maintained by CMS, broadly understood across the industry, publicly available, and aligned with existing Medicare payment frameworks. Standardizing allowed amount reporting around common claim grouping methodologies would allow users to evaluate reimbursement outcomes in a consistent manner while preserving flexibility for the wide variety of reimbursement methodologies that exist in the marketplace. By focusing on a common reporting structure rather than a common reimbursement methodology or common contract design, CMS can improve transparency and

comparability without imposing additional constraints on contract design or requiring the encoding of increasingly detailed contractual provisions.

CONSUMER-FRIENDLY DISPLAY QUESTIONS:

1. Should we revisit the number and types of CMS-specified shoppable services? What are the advantages and disadvantages of increasing or decreasing the number of shoppable services? Are there specific shoppable services that CMS should include, exclude, or update on the list of 70 CMS-specified items and services?

We believe periodic review of the CMS-specified shoppable services is appropriate to ensure the list remains relevant and reflects how consumers seek healthcare services today. However, rather than focusing on expanding or reducing a specific number of required services, we encourage CMS to preserve flexibility for hospitals to present the services and information most relevant to their patient populations and communities.

2. What would be the advantages and/or disadvantages of requiring hospitals to submit a shoppable services file? Alternatively, what would be the advantages and/or disadvantages of removing the deemed compliance for the price estimator tools? Does the current incongruity in how hospitals display shoppable services, with some posting a shoppable services file and others utilizing a price estimator tool, make it more difficult for consumers to actually compare prices for shoppable services across different hospitals? What positive or negative effects would consumers experience if the price estimator tool alone were no longer considered compliant?

We believe Price Estimator Tools (PETs) should remain the preferred mechanism for satisfying consumer-friendly display requirements.

The primary advantage of a PET is that it provides information at the individual patient level rather than the generalized service level. Consumers typically want answers to questions such as:

- What will my procedure cost?
- What services are included?
- What is my expected out-of-pocket responsibility?
- What ancillary services may be required?

A static shoppable services file cannot easily answer these questions because it must represent broad categories of care without the patient-specific context needed to generate a meaningful estimate.

PETs provide several advantages:

- Estimates can be individualized based on insurance coverage, benefit information, and anticipated services.
- Ancillary services, implants, bundled services, and related items can be incorporated into the estimate.

- Information can be displayed using consumer-friendly language, graphics, and educational content.
- Technology allows hospitals to continually refine and enhance the user experience.
- Additional service combinations and treatment pathways can be represented without dramatically increasing file size.

By contrast, requiring increasingly detailed shoppable service files would likely result in a massive expansion of data volume as hospitals attempt to account for different care pathways, service combinations, and ancillary services.

We are concerned that removing deemed compliance for PETs could unintentionally shift resources away from the most consumer-friendly solution and toward static reporting requirements that are more difficult for patients to understand and use.

3. For hospitals that satisfy the consumer-friendly display requirements through a price estimator tool, what mechanisms could be used to make the underlying data available in a separate file?

We would caution against requiring hospitals to create an additional shoppable services file or separate underlying data file for price estimator tools. Hospitals already provide comprehensive pricing information through the Machine-Readable File (MRF), which is intended to serve as the centralized repository for hospital pricing data. Creating an additional file would introduce duplicative reporting requirements, increase administrative burden, and create potential confusion regarding which source represents the authoritative pricing information.

More importantly, we do not believe a static file can adequately represent the value provided by a PET. The primary purpose of a PET is not simply to display pricing data, but to apply logic that produces individualized estimates based on a patient's anticipated services, insurance coverage, benefit design, and expected care pathway. The resulting estimate may incorporate bundled services, ancillary items, implants, and other factors that are difficult to represent in a static file format. A separate file would therefore provide only a partial view of the information available through the estimator and could easily be misinterpreted without the accompanying estimation logic.

If CMS's objective is to ensure access to the underlying pricing information, we believe the existing MRF already serves that purpose. The MRF provides comprehensive pricing information across all hospital services, while the PET serves as the consumer-facing tool that translates that information into a personalized estimate. These tools serve different but complementary purposes. The MRF supports transparency, research, and data analysis, whereas the PET supports consumer decision-making.

Rather than creating a new reporting requirement, we encourage CMS to continue allowing hospitals to leverage the combination of the MRF and a patient-facing estimator tool. This approach avoids duplicative reporting, reduces administrative burden, encourages innovation in consumer-facing technologies, and provides patients with information that is significantly more accessible and actionable than could reasonably be conveyed through another static file.

4. Are there circumstances in which the standard charges in a hospital's shoppable services file would not match the information for the same items and services listed in the hospital's MRF? Why would a hospital be able to provide a discounted cash price in its price estimator tool but not in its MRF?

As a general principle, consumers should expect consistency between the pricing information presented through a hospital's Machine-Readable File (MRF) and shoppable services disclosures. These tools are intended to communicate the same underlying pricing information, albeit for different purposes and audiences.

However, it is important to recognize that the MRF and a PET serve fundamentally different roles. The MRF is designed to provide comprehensive transparency across all hospital services and pricing methodologies, while a PET is designed to help consumers understand the expected cost of a particular healthcare encounter. As a result, a PET may present information in a more patient-friendly manner, incorporate additional contextual information, and leverage technology to help consumers better understand how pricing applies to their specific circumstances.

For example, a PET may:

- Present pricing information in plain-language descriptions rather than technical billing terminology.
- Guide patients through common care pathways and service combinations.
- Identify ancillary services, implants, bundled services, and other items commonly associated with a procedure.
- Provide estimates based on real-time information and current pricing data.
- Incorporate user-friendly features such as educational content, service explanations, and interactive estimate scenarios.

These capabilities do not necessarily change the underlying pricing information; rather, they enhance how the information is delivered and understood by consumers.

It is also important to note that many of these benefits cannot be effectively replicated within a static shoppable services file. By its nature, a file-based approach requires hospitals to publish discrete data elements and predefined service combinations, which limits the ability to present individualized information, incorporate patient-specific factors, dynamically account for ancillary services, or leverage modern technology to improve the consumer experience. As CMS seeks to improve transparency and accessibility, we believe there is significantly greater value in tools that can adapt information to a patient's specific circumstances than in expanding static reporting requirements that may be more difficult for consumers to navigate and understand.

With respect to discounted cash pricing, it is important to recognize that the MRF and consumer-facing estimation tools often utilize the same underlying pricing information but present that information in different ways based on their intended purpose. **In many cases, discounted cash pricing within the MRF is reported at the CDM line-item level, representing the lowest level of granularity commonly available within the hospital's pricing and charge data environment. By contrast, consumer estimation tools are frequently designed to estimate a patient's expected cost for an encounter or episode of care and therefore often leverage claims-based repositories and other technologies that project reimbursement and charges at the claim level rather than the individual line-item level.**

As a result, the distinction is not one of inconsistency between the MRF and the consumer estimate. Rather, the MRF serves as a comprehensive repository of pricing information derived from discrete hospital data sources, while consumer estimation tools leverage technology to organize and apply that

information in a manner that is more relevant to a patient's anticipated healthcare experience. For example, consumer-facing tools may be able to illustrate how discounted cash pricing applies across a complete outpatient visit, procedure, or inpatient stay rather than requiring patients to interpret individual charge components.

We recognize that additional technological considerations may be necessary when developing encounter-level self-pay estimates, particularly because self-pay patients often do not have the same historical claims records available as insured populations. Nevertheless, this is a strong example of how consumer-facing estimation tools can leverage technology to create a more robust and meaningful patient experience. The advantage is not that the tool contains different pricing information than the MRF, but rather that it can translate underlying pricing data into a more personalized, understandable, and actionable estimate that better reflects how a patient is likely to experience care.

5. Which data elements are important for consumers to make comparisons between hospitals? Would a standard shoppable services file template make the information more comparable? How could a shoppable services file indicate the ancillary services that are included in or excluded from the price?

We believe consumers are primarily interested in understanding their expected cost of care and anticipated out-of-pocket responsibility when comparing providers. Rather than comparing individual data elements within a shoppable services file, consumers benefit most from tools that translate pricing information into meaningful estimates based on their specific healthcare needs and insurance coverage.

For this reason, we believe comparisons are most appropriately facilitated through tools that leverage the pricing data available within hospital and payer Machine-Readable Files (MRFs). These transparency files provide the underlying data necessary to support comparison and analysis, while technology platforms can organize and present that information in a manner that is more useful to consumers.

In particular, health plans already maintain tools that are specifically designed to help members compare healthcare providers and settings of care. These tools are uniquely positioned to support consumer decision-making because they can incorporate the individual's specific benefit design, deductible status, copayment obligations, coinsurance responsibilities, network participation, and other coverage provisions. As a result, they can translate pricing information into a personalized estimate of expected financial responsibility across multiple providers and care settings.

We believe these payer-sponsored tools are especially valuable because their incentives are aligned with helping consumers identify lower-cost, high-value care options, and they possess the complete benefit and eligibility information necessary to generate accurate comparisons. While hospitals can and should provide information regarding their services and pricing, it may not be practical or efficient for individual hospitals to develop a common comparison platform when payers already possess the information required to perform these comparisons across providers and settings.

Accordingly, while there may be value in maintaining consumer-friendly hospital pricing information, we believe the greatest opportunity to improve comparison shopping lies in encouraging solutions that leverage hospital and payer transparency data together, particularly through tools that can translate that information into personalized cost estimates for individual consumers.

6. How should hospitals present ancillary items, implants, and bundled services so consumers better

understand total expected costs? What approaches most effectively distinguish included versus excluded services?

We believe consumers best understand ancillary items, implants, and bundled services when those elements are presented within the context of a specific healthcare encounter rather than as individual line items or isolated data elements. Patients generally want to understand the total expected cost associated with a procedure, visit, or episode of care and whether additional services are likely to be required. As a result, the most effective approach is one that connects ancillary services to the primary service being considered by the patient.

Technology-enabled estimation tools are particularly well suited to this purpose because they can identify the primary service being requested and then present the ancillary services, implants, supplies, medications, and bundled components that are commonly associated with that service. These tools can distinguish between services that are typically included in an estimate and those that may vary based on a patient's clinical circumstances, helping consumers better understand both expected costs and potential cost variability.

While it is theoretically possible to represent included and excluded ancillary services through a static file, doing so comprehensively would be challenging. To accurately account for the numerous combinations of payer arrangements, benefit designs, clinical pathways, ancillary services, bundled services, implants, and patient-specific circumstances, hospitals would need to create an increasingly large and complex set of service permutations. The resulting file could become extremely large while still falling short of representing the full range of potential patient experiences.

For this reason, we believe the most effective approach is to leverage technology to present ancillary services in relation to the specific service or encounter being evaluated. This allows consumers to understand not only the primary service but also the additional services that commonly contribute to the total cost of care. It also provides hospitals with the flexibility to present information in a more understandable and consumer-friendly manner as healthcare services, reimbursement methodologies, and patient needs evolve over time.

Ultimately, the goal should be helping consumers understand the likely total cost associated with a healthcare encounter rather than requiring hospitals to publish increasingly detailed static files attempting to account for every possible service combination. Technology-enabled tools provide a more practical and meaningful way to distinguish included versus excluded services while giving consumers a clearer picture of their expected healthcare costs.

7. What additional information should we consider to enhance the comparability of the consumer-friendly display data between hospitals?

Rather than expanding static file requirements, we believe CMS should continue building upon the existing PET framework. Under the current Hospital Price Transparency requirements, CMS deems a PET compliant when it: (1) includes at least 300 shoppable services, including as many of the 70 CMS-specified services as the hospital offers and enough additional hospital-selected services to reach at least 300 services; (2) provides a patient-specific estimate of the amount the individual will be obligated to pay; and (3) is publicly accessible without charge and without requiring registration, account creation, usernames, or passwords.

We recommend CMS consider adding a fourth requirement that encourages hospitals to provide consumers with information regarding commonly associated ancillary items and services related to the primary service being evaluated. For example, a consumer researching a surgical procedure may benefit from understanding that implants, supplies, medications, imaging services, laboratory testing, anesthesia, recovery services, or other ancillary items are commonly associated with that procedure and may contribute to the total cost of care.

We believe this enhancement would provide substantially greater value to consumers than attempting to represent every potential ancillary service combination within a static shoppable services file. Because ancillary services often vary based on payer arrangements, benefit designs, physician decisions, clinical circumstances, and patient-specific factors, a comprehensive static file would likely become extremely large and difficult for consumers to navigate. To accurately represent all possible service combinations across payers, plans, procedures, and patient scenarios, hospitals would be required to create an increasingly complex set of pricing permutations that still may not reflect an individual patient's actual experience.

By contrast, a PET can leverage technology to present commonly associated ancillary services within the context of the primary service being evaluated and help consumers better understand the components that frequently contribute to total cost of care. Rather than requiring consumers to interpret large amounts of static information, a PET can provide a more meaningful, encounter-based view of expected services and related costs.

It is also important to recognize that health plans increasingly provide member-facing cost transparency and comparison tools that incorporate deductible status, benefit design, coinsurance obligations, network participation, and other coverage provisions to estimate patient responsibility across providers and settings of care. These payer tools are uniquely positioned to translate hospital and payer transparency data into personalized estimates because they possess the complete coverage information necessary to calculate expected out-of-pocket costs. Hospital PETs can complement these resources by helping consumers better understand the services and ancillary items commonly associated with a particular procedure or encounter.

Accordingly, we encourage CMS to consider adding a fourth PET requirement that provides visibility into commonly associated ancillary services as a means of further enhancing consumer understanding of expected healthcare costs. This targeted enhancement would build upon the existing PET framework, improve the patient experience, and help consumers better understand total cost of care without introducing the complexity and limitations associated with expanded static reporting requirements.