



A MEDICARE LEARNING NETWORK® (MLN) EVENT

# Hospital Price Transparency: Using Machine-Readable File Sample Formats

July 26, 2023

**Presenters:**

Terri L Postma, MD, CHCQM  
Medical Officer

&

Patrick Sier  
Digital Service Expert

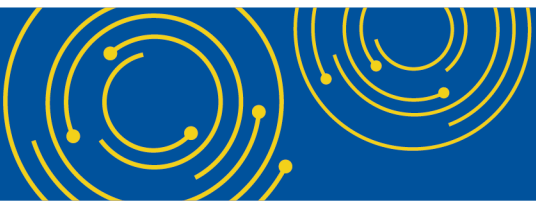
Centers for Medicare & Medicaid Services



# Disclaimer

This presentation was current at the time it was published or uploaded onto the web. Medicare policy changes frequently so links to the source documents have been provided within the document for your reference.

This presentation was prepared as a service to the public and is not intended to grant rights or impose obligations. This presentation may contain references or links to statutes, regulations, or other policy materials. The information provided is only intended to be a general summary. It is not intended to take the place of either the written law or regulations. We encourage readers to review the specific statutes, regulations, and other interpretive materials for a full and accurate statement of their contents.



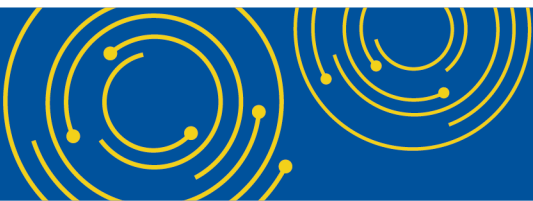
# Hospital Price Transparency Regulation Introduction

- The Hospital Price Transparency regulation implements Section 2718(e) of the [Public Health Service Act](#) and requires each hospital operating within the United States to establish (and update) and make public a yearly list of the hospital's standard charges for items and services provided by the hospital, including for diagnosis-related groups established under section 1886(d)(4) of the Social Security Act.
- Starting on January 1, 2021, each hospital operating in the United States is required to make this information available in two ways:

**As a comprehensive machine-readable file (MRF) with all standard charges for all items and services**

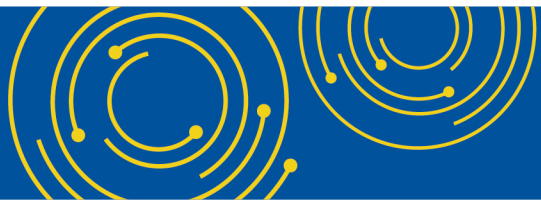
**AND**

**As a display of standard charges for 300 shoppable services in a consumer-friendly format**



# Introducing Standardization to the MRF

---

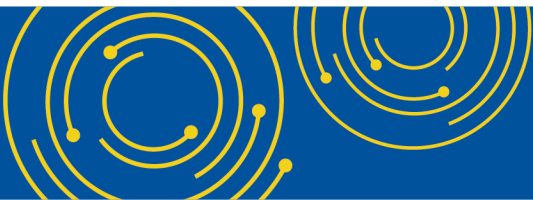


# Interested Party Feedback about Standardization

Since implementation in January 2021, CMS has received feedback from interested parties recommending and supporting more standardization for the format and encoding of standard charge information in hospital MRFs.

- In the CY2022 OPPS/ASC proposed rule (86 FR 42321), CMS sought comment on improving standardization of the MRF. **In response, many commenters urged CMS to create a standard template.**
- MITRE, a federally funded research and development center, used input from technical experts to make informed recommendations to CMS in the summer of 2022. **MITRE recommended three standard file layouts and standardized categories (referred to as “data elements”) of data that can help contextualize the standard charges established by hospitals.**

Interested parties indicated that more standardization is necessary to improve: the ability of the public to aggregate and use standard charge information; the public’s understanding of hospital standard charges by providing additional needed context; and hospitals’ ability to comply with requirements.



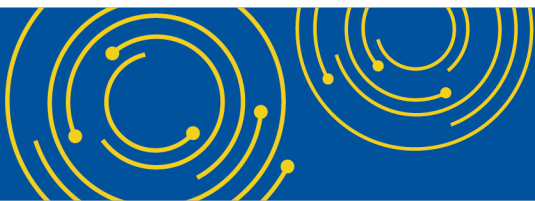
# Voluntary MRF Sample Formats and Tools are Available

**CMS recently released Version 1.1 of the voluntary MRF sample formats which are accompanied by a comprehensive data dictionary.**

The CMS release included voluntary machine-readable sample formats and the accompanying resources (for example, data dictionary and validator tool) that hospitals can use to make public their standard charge information in an MRF.

- Sample format layouts are available in 1) CSV “wide” format, 2) CSV “tall” format, and 3) JSON schema. Interested parties indicated these formats and layouts are the most frequently used by hospitals.
- The data dictionary provides detailed information on how to use the sample formats to encode hospital standard charges and other information needed for context.
- The validator tool allows hospitals to check to make sure the MRF meets technical specifications before posting the file online.

Voluntary sample formats and tools can be found [on the Hospital Price Transparency Resources Page](#).



# CY2024 OPPS/ASC Proposed Rule

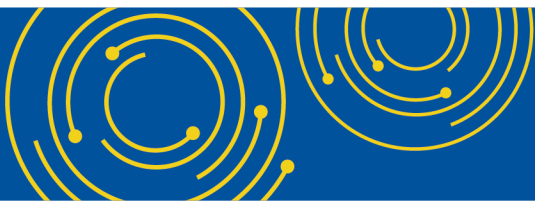
**In the CY2024 OPPS/ASC Proposed Rule, CMS is proposing to require hospitals to encode data for a revised and expanded set of data elements in a CMS template layout.**

In order to standardize MRF data, CMS is proposing to require that hospitals:

- Conform to a CMS template layout (offered as a CSV “wide” format, a CSV “tall” format, and a JSON schema).
- Encode all standard charge information, as applicable, that correspond to a set of required data elements, including: general data elements, each type of standard charge, description, and codes.
- Comply with specified technical instructions (such as a data dictionary).

If finalized, these requirements would become effective January 1, 2024. CMS is proposing an enforcement grace period until March 1, 2024. The proposed rule can be found on the [CY2024 OPPS/ASC Proposed Rule Federal Register Page](#).

**The 60-day comment period lasts until September 11, 2023.**

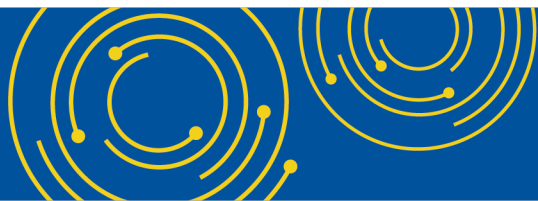


# Data Element Comparison Chart: Sample Format vs Proposed Rule

This table summarizes and compares the existing sample format data elements with the proposed required data elements.

Data Element	Sample Format	Proposed Rule
File Date	YES	YES
File Version	YES	YES
Hospital Name	YES	YES
Hospital License	YES	YES
Hospital Location	YES	YES
Hospital Address	NO	YES
Hospital Financial Aid Policy	YES	NO
Gross Charges	YES	YES
Cash Discounted Price	YES	YES
Payer-Specific Negotiated Charges*	YES	YES
Minimum and Maximum Deidentified Negotiated Charges	YES	YES
Consumer-Friendly Expected Allowed Amount	NO	YES
Item/Service Description	YES	YES
Billing/Accounting Codes, Modifiers, and Code Type	YES	YES
Billing Class	YES	NO
Setting (Inpatient or Outpatient)	YES	YES
Drug Unit and Type of Measurement	YES	YES

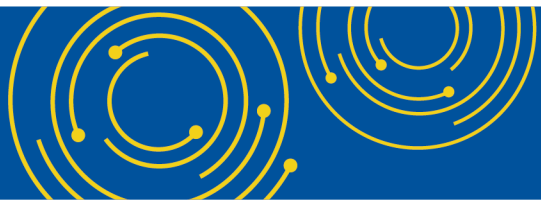
\* By payer and plan; indicated as a dollar amount, percentage, or algorithm; type of contracting method





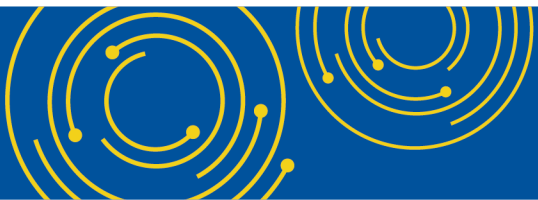
# Poll

---

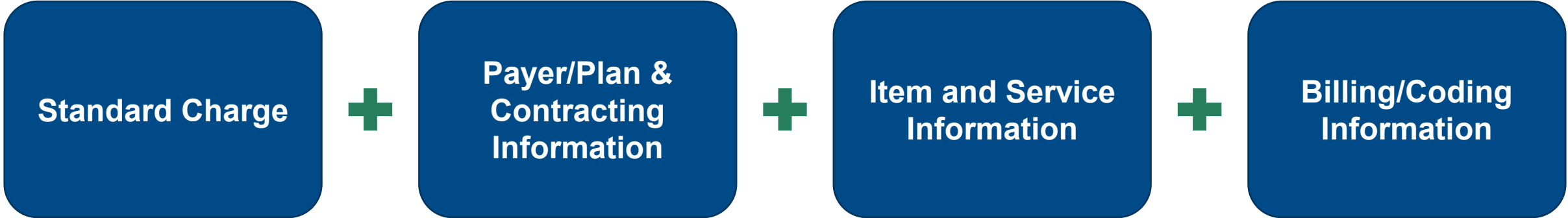


# Data Elements in the MRF Sample Format

---



# Data Elements Create Context for Hospital Standard Charges



# Encoding Data Elements and Values

**Encoding** is the process of entering data into MRF fields in a specified form.

**Data Elements** are the categories of data that should be included in the MRF. The data dictionary provides instructions for how to encode the data elements in the MRF. In CSV spreadsheets, data elements appear as column headers.

**Values** are the types of data that can be encoded into the MRF sample format. The data dictionary provides rules for encoding the data.

**EXAMPLE CSV Excerpt**

```
hospital_name,last_updated_on,version,hospital_location,financial_aid_policy,license_number | IN,,,,,,,,,,,,,,,,,,,,,
Hospital A,1/1/2023,1.0.0,Hospital A Town Indiana,25%-75% of gross charges based on income of individual,123XYZ###,,,,,,,,,,,,,,,,,,,,,
description,code | 1 ,code | 1 | type,code | 2 ,code | 2 | type,billing_class,setting,drug_unit_of_measurement,drug_type_of_measurement,modifiers
```

**EXAMPLE MRF in CSV Viewer (e.g. Spreadsheet)**

hospital_name	last_updated_on	version
Hospital A	2023-01-01	1.0.0
description	code   1	code   1   type
Under Diagnostic Radiology (Diagnosis)	73560	HCPCS
Patient transfer to non-ICU location	G9656	HCPCS
Under Adjacent Tissue Transfer or Repair	14020	CPT
Under Repair, Revision, and/or Reconstructive	27445	CPT

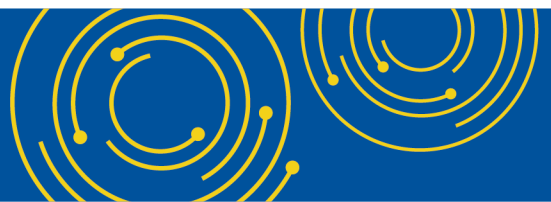
HEADERS ←

VALUES ←

HEADERS ←

VALUES ←

EMPTY CELLS ←

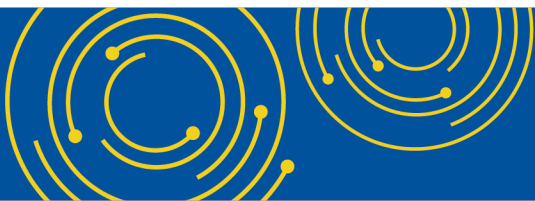


# General Information

The MRF sample formats include data elements for general information about the hospital and the hospital's MRF.

Data Element	Data Dictionary Definition	Example Value(s)
<b>Hospital Name*</b>	The legal business name of the hospital associated with the file.	West Mercy Hospital
<b>Hospital File Date*</b>	Date on which the file was last updated.	2022-01-01
<b>Version*</b>	The version of the sample format used.	1.0.0
<b>Hospital Location*</b>	The unique name of the hospital location absent any acronyms.	Lakeview Hospital   Lakeview Hospital Surgical Center
<b>Hospital Financial Aid Policy</b>	The hospital's financial aid policy, also known as charity care, that is applied to items and services. This may include cash price policies that are non-standard such as prices that are tiered, based on income levels, or other requirements.	"Payment plans are available and/or a patient can be put on a sliding scale, which would allow a percentage of assistance depending on their eligibility."
<b>Hospital Licensure Information*</b>	The hospital license number for the hospital location(s).	22-005106-1

\* An asterisk indicates that the data element is a proposed required data element in the CY2024 OPPS/ASC Proposed Rule.

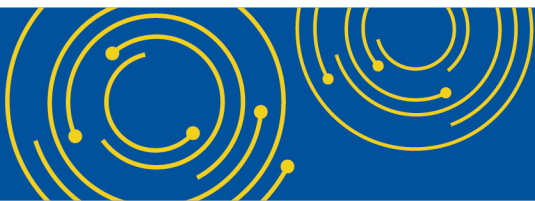


# Standard Charge Data Elements

The MRF sample formats include data elements for the standard charges hospitals must report. The Gross Charge and Discounted Cash Prices must be displayed as dollar amounts. Payer-specific standard charges may, if necessary, be displayed as a dollar amount, percent, or algorithm.

Data Element	Data Dictionary Definition	Example Value(s)
<b>Gross Charge*</b>	Gross charge is the charge for an individual item or service that is reflected on a hospital's chargemaster, absent any discounts (see 45 CFR 180.20).	9999.99
<b>Discounted Cash Price*</b>	Discounted cash price is defined as the charge that applies to an individual who pays cash (or cash equivalent) for a hospital item or service (see 45 CFR 180.20).	9999.99
<b>Payer-specific Negotiated Charge: Dollar Amount*</b>	Payer-specific negotiated charge (expressed as a dollar amount) that a hospital has negotiated with a third-party payer for the corresponding item or service.	9999.99
<b>Payer-specific Negotiated Charge: Percentage*</b>	Payer-specific negotiated charge (expressed as a percentage) that a hospital has negotiated with a third-party payer for the corresponding item or service.	70.5
<b>De-identified Minimum Negotiated Charge*</b>	De-identified minimum negotiated charge is the lowest that a hospital has negotiated with all third-party payers for an item or service (see 45 CFR 180.20).	9999.99
<b>De-identified Maximum Negotiated Charge*</b>	De-identified maximum negotiated charge is defined as the highest charge that a hospital has negotiated with all third-party payers for an item or service (see 45 CFR 180.20).	9999.99

\* An asterisk indicates that the data element is a proposed required data element in the CY2024 OPPS/ASC Proposed Rule.

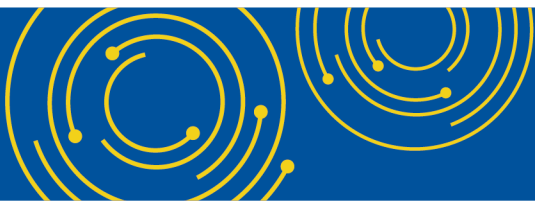


# Payer and Contracting Method Data Elements

Additional data elements describe the payers with which the hospital has contracted and the relevant plan(s) and contracting methods for each item/service.

Data Element	Data Dictionary Definition	Example Value(s)
<b>Payer Name*</b>	The name of the third-party payer that is, by statute, contract, or agreement, legally responsible for payment of a claim for a healthcare item or service. (45 CFR § 180.20)	Payer_A
<b>Plan Name*</b>	The name of the Payer's specific plan associated with the standard charge.	Standard PPO
<b>Contracting Method*</b>	The type of contract arrangement used to establish the payer-specific negotiated charge.	Case Rate, Fee Schedule, Percent Of Total Billed Charges, Per Diem, Other
<b>Additional Generic Notes*</b>	A free text data element to help explain any of the data including standard charges based on algorithms, blank values due to no applicable data, or other contextual information that aids in the comprehension of the standard charges.	"The Payer A Plan 1 contract is based on percent of billed charges and therefore there are no dollar amount negotiated charges associated with this plan."
<b>Additional Payer-specific Notes*</b>	A free text data element to help explain any of the data in the file that is related to a payer-specific negotiated charge. If a payer-specific negotiated charge can only be expressed as an algorithm, the algorithm should be indicated here.	"The standard charge is calculated based on the procedure MS-DRG base rate of \$45,004 plus a variable revenue code billed at 50 percent of gross charge plus the cost of the implant billed at 80 percent of the gross charge."

\* An asterisk indicates that the data element is a proposed required data element in the CY2024 OPPS/ASC Proposed Rule.

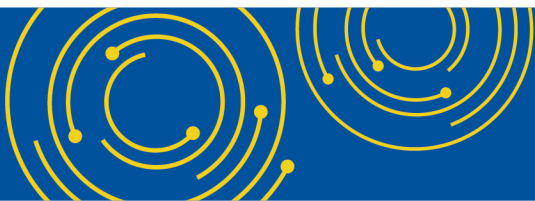


# Item and Service Information Data Elements

Item and service information data elements describe the item or service, including the setting and other elements of care delivery.

Data Element	Data Dictionary Definition	Example Value(s)
<b>Item or Service Description*</b>	Description of each item or service (defined at 45 CFR 180.20) provided by the hospital that corresponds to the standard charge the hospital has established.	“OR time, 15 min”
<b>Setting*</b>	The place (inpatient, outpatient, or both) where the item or service is provided for the associated standard charge amount.	Inpatient, Outpatient, Both
<b>Drug Unit of Measurement*</b>	The unit value that corresponds to the established standard charge for drugs.	1
<b>Drug Type of Measurement*</b>	The measurement type that corresponds to the established standard charge for drugs.	GR, ME, ML, UN

\* An asterisk indicates that the data element is a proposed required data element in the CY2024 OPPS/ASC Proposed Rule.



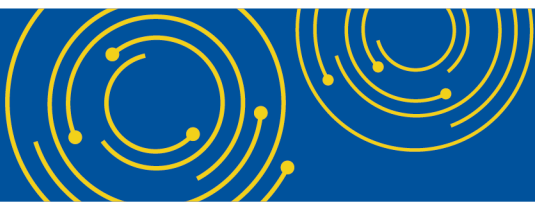


# Billing/Coding Information

The MRF sample format includes data elements that describe the billing and coding information relevant to each item or service. The sample format allows for multiple billing code and code types for an item or service. Hospitals should include all the corresponding code and code types associated with a standard charge.

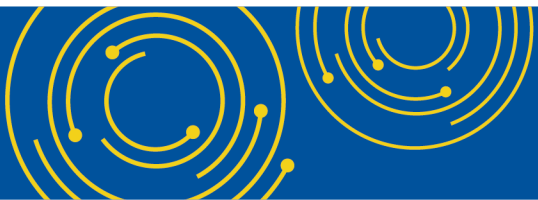
Data Element	Data Dictionary Definition	Example Value(s)
<b>Code*</b>	Any code used by the hospital for purposes of accounting or billing for the item or service.	99231
<b>Code Type*</b>	The associated coding type for the 'Code' data element. Examples include Current Procedural Terminology (CPT), Healthcare Common Procedure Coding System (HCPCS), National Drug Code (NDC), Revenue Center (RC) code, and others.	CPT, HCPCS, ICD, MS-DRG, R-DRG, S-DRG, APS-DRG, AP-DRG, APR-DRG, APC, NDC, HIPPS, LOCAL, EAPG, CDT, RC, CDM
<b>Billing Class</b>	The type of billing for the item/service at the established standard charge.	Professional, Facility
<b>Modifiers*</b>	Modifiers indicate that a service or procedure performed has been altered by some specific circumstance, but not changed in its definition or code. They are used to add information or change the description of service to improve accuracy or specificity.	50   62

\* An asterisk indicates that the data element is a proposed required data element in the CY2024 OPPI/ASC Proposed Rule.



# Examples of How to Display Standard Charges

---

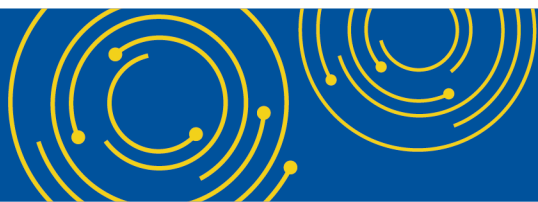


# Case Rate CSV Wide Format Example

**Case Rate:** A flat rate for a package of items and services triggered by a diagnosis, treatment, or condition for a designated length of time.

<i>Description</i>	<i>standard_charge</i> <i>  gross</i>	<i>standard_charge</i> <i>  Payer_A   Plan_1</i>	<i>standard_charge   Payer_A</i> <i>  Plan_1   contracting_method</i>	<i>additional_payer_notes</i> <i>  Payer_A   Plan_1</i>
Procedure X		5000	case rate	+ 50% of total implant cost
Procedure Y		5000	case rate	+ 60% of total implant cost
Implantable device 1	500			
Implantable device 2	750			

If the standard charge is a case rate coupled with an additional amount determined by an algorithm (e.g., \$5000 plus 60% of the total implant cost), post the case rate in the 'Payer-specific Negotiated Charge: Dollar Amount' and use the appropriate additional notes data element for the CSV Tall and Wide formats to enter the additional algorithm, i.e., "plus 60% of total implant cost."

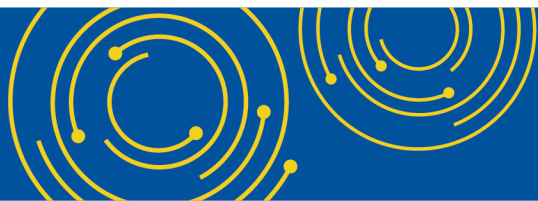


# Fee Schedule CSV Wide Format Example

**Fee Schedule:** The standard charge is based on a fee schedule. Examples of common fee schedules include Medicare, Medicaid, commercial payer, and workers compensation.

<i>Description</i>	<i>standard_charge</i> <i> Payer_A Plan_1</i>	<i>standard_charge Payer_A</i> <i> Plan_1 contracting_method</i>	<i>standard_charge</i> <i> Payer_A</i> <i> Plan_1 percent</i>	<i>additional_payer_notes  </i> <i>Payer A   Plan_1</i>
Procedure X	5000	fee schedule	150	150% of Hospitals Specific Medicare Reimbursement Rate

In this example, the contract indicates that for Procedure X, the hospital is reimbursed at 150% of the Hospital's own Medicare reimbursement rate. The dollar amount of the 150% is required to be calculated and entered in the 'Payer-specific Negotiated Charge: Dollar Amount' data element (in this example, that is \$5000). The 'Payer-specific Negotiated Charge: Percentage' data element may also be populated with the percent and the appropriate additional notes data elements for the CSV Tall and Wide formats may reference the fee schedule the negotiated charge is based on to provide additional context for consumers of the file.

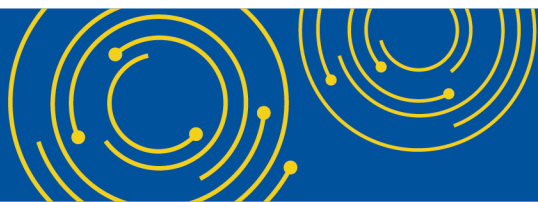


# Percent of Total Billed Charge CSV Wide Format Example

**Percent of Total Billed Charge:** The payer-specific negotiated charge is based on a percentage of the total billed charges for an item or service. This percentage may vary depending on certain pre-determined criteria being met.

<i>Description</i>	<i>standard_charge   Payer_A   Plan_1</i>	<i>standard_charge   Payer_A   Plan_1   percent</i>	<i>standard_charge   Payer_A   Plan_1   contracting_method</i>
<b>Procedure X</b>		75	percent of total billed charges

In scenarios where contracts are structured such that specific service packages are reimbursed based on a percentage of the total billed gross charges (where the total billed charge is different for each person in the payer’s plan), indicating a payer-specific negotiated charge as a dollar amount may not be possible. The negotiated percentage is entered in the ‘Payer-Specific Negotiated Charge: Percentage’ data element. In this example, Procedure X is reimbursed at 75% of total billed charge. Enter the percent as a whole number, “75”, and not “0.75” or “75%”.

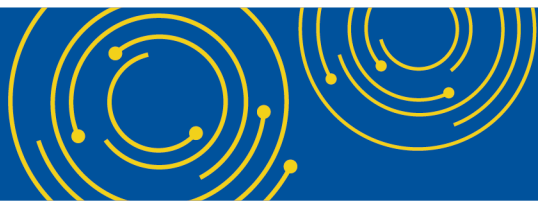


# Per Diem CSV Wide Format Example

**Per Diem:** The per day charge for the described item or service. Enter tier rates as a separate distinct service description, if applicable, otherwise enter this information in the ‘Additional Generic Notes’ data element in the CSV Tall Format or the ‘Additional Payer-specific Notes’ data element in the CSV Wide Format. For example, “Service A 1-3 days” and “Service A 4-7 days.”

<i>Description</i>	<i>standard_charge   Payer_A   Plan_1</i>	<i>standard_charge   Payer_A   Plan_1   contracting_method</i>	<i>additional_payer_notes   Payer_A   Plan_1</i>
<b>Procedure X days 1-3</b>	5000	per diem	Per diem cost for the first three days of hospitalization.
<b>Procedure X days 4-7</b>	6000	per diem	Per diem cost for days 4-7.
<b>Procedure X days 8+</b>	7000	per diem	Per diem cost for 8+ days.

Per diem arrangements often have different contractual reimbursement rates depending on the number of days for the service. In the above example “Procedure X” has three different rates depending on the number of days. The first three days are a \$5,000 standard charge, the next four days are a \$6,000 charge, and any amount of time after is \$7,000.

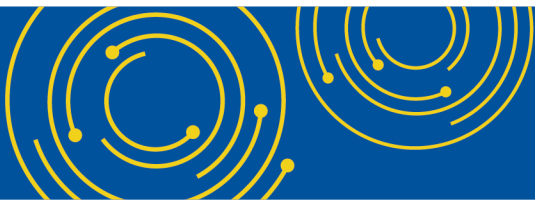


# Other Contracting Method CSV Wide Format Example

**Other:** A contracting method for a particular item or service that is not accurately described by the other valid values for the ‘Contracting Methods’ data element. For example, a hospital contract may include a capitated arrangement with prospective payments that encompass a broad array of services. This may be comprehensive care for an entire group or the total cost of care for treating a primary condition (e.g., diabetes) or a limited set of specialty services (e.g., primary care or behavioral health).

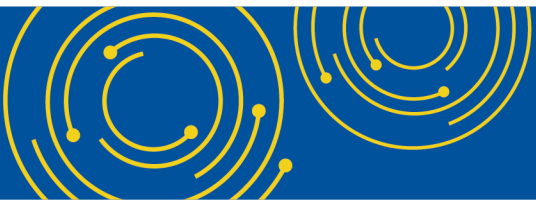
<i>Description</i>	<i>standard_charge   Payer_A   Plan_1</i>	<i>standard_charge   contracting_method   Payer_A   Plan_1</i>	<i>additional_payer_notes   Payer_A   Plan_1</i>
<b>Procedure X</b>		Other	This service is part of a \$500 prospective per member per month payment for the comprehensive total cost of care. There are no established negotiated standard charges. This applies to all Payer A Plan 1 items and services with capitation as the contracting method.
<b>Procedure Y</b>		Other	
<b>Procedure Z</b>		Other	

Select “other” for the contracting method value and enter the dollar amount in the ‘Payer-specific Negotiated Charge: Dollar Amount’ data element if possible and explain the arrangement in the appropriate additional notes data elements for the CSV Tall and Wide formats. The details of these arrangements do not need to be repeated if it’s clear for which items and services the notes apply.



# MRF Validator Demonstration

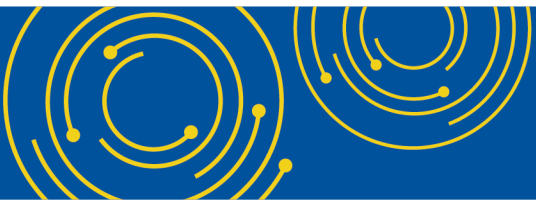
---





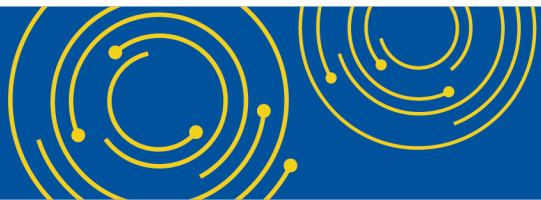
# Interested in Volunteering to Test the Validator?

Volunteers interested in providing preliminary feedback should contact [TalkToUs@cms.hhs.gov](mailto:TalkToUs@cms.hhs.gov), subject heading “HPT Validator Tool Testing.”



# Questions & Answers

---



# CY2024 OPPS/ASC Proposed Rule Resources

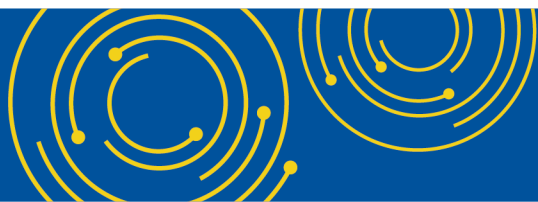
**The CY2024 OPPS/ASC Proposed Rule is scheduled to be published in the Federal Register on July 31, 2023.**

Once it is published, it will be available on the [CY2024 OPPS/ASC Proposed Rule Federal Register Page](#) in an official form.

Until then, you can download the [unpublished PDF version of the CY2024 OPPS/ASC Proposed Rule](#).

You may find additional information in the [Hospital Price Transparency Proposals \(CMS-1786-P\) Fact Sheet](#).

**To be assured consideration, your comments must be received by the date indicated in the Federal Register notice: September 11, 2023.** You may submit electronic comments on this regulation to <https://www.regulations.gov>. Follow the "Submit a comment" instructions.



# Hospital Price Transparency Resources



Visit the [HPT Website Resources Page](#) for:

- Sample Formats and Corresponding Data Dictionary
- MRF Validator
- FAQs

For additional information, please contact:  
[PriceTransparencyHospitalCharges@cms.hhs.gov](mailto:PriceTransparencyHospitalCharges@cms.hhs.gov)

