

8 Steps to a Machine-Readable File of All Items & Services

The hospital price transparency requirements are codified in our regulations at 45 C.F.R. Part 180 and require most hospitals to make public their standard charges (as defined at 45 CFR § 180.20) online in two ways:

1. A comprehensive machine-readable file that includes the following standard charges for all hospital items and services: gross charges, discounted cash prices, payer-specific negotiated charges, and de-identified minimum and maximum negotiated charges; and
2. A consumer-friendly display that includes the following standard charges for at least 300 'shoppable' services (or as many as the hospital provides if less than 300) that are grouped with charges for ancillary services that are customarily provided by the hospital: discounted cash prices, payer-specific negotiated charges, and de-identified minimum and maximum negotiated charges.

This document addresses only the requirements for the comprehensive machine-readable file as specified at 45 CFR § 180.50. Federally owned or operated hospitals and state forensic hospitals that provide treatment exclusively for individuals who are in the custody of penal authorities are deemed by CMS to be in compliance with the requirements for making public standard charges.¹ For additional information on the consumer-friendly display of shoppable services, refer to 10 Steps to a Consumer-Friendly Display of Shoppable Services.²

Step 1: Identify each hospital location that must make available its list of standard charges³

Each hospital location operating under a single hospital license (or approval) that has a different set of standard charges than the other location(s) operating under the same hospital license (or approval) must separately make public the standard charges applicable to that location. You do not need to post separate files for each clinic operating under a consolidated state hospital license, if the file includes charges for all items and services offered at the single campus location (84 FR [65564](#)). All files must clearly identify the hospital location with which the information is associated.⁴ If multiple locations have the same set of standard charges, you should make sure that is clearly indicated in the file.

¹ Federally owned or operated hospitals include but are not limited to: Federally owned hospital facilities, including facilities operated by the U.S. Department of Veterans Affairs and Military Treatment Facilities operated by the U.S. Department of Defense and hospitals operated by an Indian Health Program as defined in section 4(12) of the Indian Health Care Improvement Act. Refer to 45 CFR §180.20 and 45 CFR §180.30.

² <https://www.cms.gov/files/document/steps-making-public-standard-charges-shoppable-services.pdf>

³ Refer to 45 CFR §180.50(a)(2).

⁴ Refer to 45 CFR §180.50(d)(2).

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Step 2: Identify all items and services for which your hospital has established a standard charge ⁵

In the comprehensive machine-readable file, you must include all items and services for which your hospital has established a standard charge.

Items and services as defined at 45 CFR 180.20 means all items and services, including individual items and services and service packages, that could be provided by a hospital to a patient in connection with an inpatient admission or an outpatient department visit for which the hospital has established a standard charge. Examples of hospital items and services include supplies and procedures, room and board, use of the facility and other items (generally described as facility fees, services of employed physicians and non-physician practitioners (generally reflected as professional charges)), and any other items or services for which a hospital has established a standard charge. Your hospital may have established standard charges for items and services that are time-based or unit-based or have a service package that has been negotiated with a third-party payer to include treatment for complications or follow up care. These are included in the definition of hospital items and services. Refer to the examples below for further information.

- **Time-based services:** For example, you may have established a standard charge for the first hour spent in the operating room (OR) and a different standard charge for each hour after that. In this example, the item or service (e.g. the OR time) could be described as “OR time- first hour” and “OR time – each additional hour” on two rows, each associated with its relevant standard charge (84 FR [65557](#)).
- **Unit-based charges:** Medications are an example of an item or service for which your hospital may have established unit-based standard charges. For example, you may have established a standard charge for each 5mL of phenylephrine HCL 10% eye drops. In this example, the item or service (e.g. the eye drops) could be described in one row as “Phenylephrine HCL 10% - 5mL” along with the relevant standard charge.
- **Service Packages:** Some hospitals have established standard charges for service packages. The definition of items and services gives your hospital the flexibility to display the standard charges for service packages in a way that is unique to each of your payer-specific contracts (84 FR [65535](#)). For example, your hospital may have negotiated with a third-party payer on a per diem basis or for a service package identified by a DRG code. When listing service packages and their associated standard charges, your hospital is not required to list each and every individual item or service that *could* be included as part of the service package. Instead, the hospital should list the payer-specific negotiated charge (e.g. the “base rate”) and associated service package as a single line-item on its machine-readable file (84 FR 65559). A service package described as “hip or major joint replacement” would be listed with its payer-specific negotiated charge on one row of the comprehensive machine-readable file. Please note that even though you are not required to list each and every individual item or service that *could* be included as part of the

⁵ Refer to 45 CFR §180.50(a).

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service package, such items and services must be separately listed when your hospital has established a standard charge for them individually.

The five types of standard charges are defined at 45 CFR 180.20. You must make public in the machine-readable file for each of the items and services, as applicable, in the hospital inpatient setting and outpatient department setting. The five types of standard charges are:

- **Gross charge:** The charge for an individual item or service that is reflected on a hospital's chargemaster, absent any discounts.
- **Payer-specific negotiated charge:** The charge that a hospital has negotiated with a third-party payer for an item or service. Each payer-specific charge must be clearly associated with the name of the third-party payer.
 - Hospitals can consult their rate sheets or rate tables within which the payer-specific negotiated charges are often found. Such rate sheets typically contain a list of common billing codes for items and services provided by the hospital along with the associated payer-specific negotiated charge or rate (84 FR [65559](#)).
- **De-identified minimum negotiated charge:** The lowest charge that a hospital has negotiated with all third-party payers for an item or service.
- **De-identified maximum negotiated charge:** The highest charge that a hospital has negotiated with all third-party payers for an item or service.
- **Discounted cash price:** The charge that applies to an individual who pays cash (or cash equivalent) for a hospital item or service.

Your hospital is not required to make public Medicare and Medicaid fee-for-service (FFS) reimbursement rates because such data is publicly available. However, nothing in Hospital Price Transparency Final Rule limits your hospital's ability to include this information if you choose (84 FR [65558](#)).

Step 3: Gather the required data elements for each item and service⁶

After you have a list of all items and services provided by the hospital for which the hospital has established a standard charge, you must gather and include the following common data elements, as applicable, for each item or service so that consumers can make comparisons across hospitals:

- **Standard Charges:** Gross charge, discounted cash price, payer-specific negotiated charges, deidentified minimum negotiated charge, de-identified maximum negotiated charge in an inpatient and outpatient setting, as applicable. If you have not established a standard charge for an item or service across all payers, we recommend you use an indicator such as "N/A" instead of a blank space.
- **Description of the item or service:** There is no requirement for the description in your machine-readable file to be in plain language; you may consider using the short description associated

⁶ Refer to 45 CFR §180.50(b)

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with corresponding billing codes, or the short description used in your hospital's chargemaster, or another type of description.

- **Common billing or accounting code(s):** Include any code used by your hospital for purposes of accounting or billing for the item or service, including, but not limited to, the CPT code, the HCPCS code, the DRG, or other commonly used payer identifier.

Step 4: Select your file format⁷

Once you have all the required information, you can determine the file format that works best for your hospital. This file format must be machine-readable.

A machine-readable file as defined at 45 CFR 180.20 means a digital representation of data or information in a file that can be imported or read into a computer system for further processing. Examples of machine-readable formats include, but are not limited to, .XML, .JSON and .CSV formats.

Additionally, nothing in the Hospital Price Transparency Final Rule limits your hospital from providing additional information or details. For example, your hospital may wish to define elements in a data dictionary or provide more specificity in data file formats to make the file easier to use.

Step 5: Name your machine-readable file according to the CMS naming convention⁸

Hospitals must use a CMS-specified naming convention, which we believe will help stakeholders more easily locate your hospital's comprehensive machine-readable file. Your hospital must use the following naming convention for your comprehensive machine-readable file:

<ein>_<hospitalname>_standardcharges.[json|xml|csv]

- <ein>: Your Hospital's Employer Identification Number
- <hospital-name>: Name of Your Hospital
- <standardcharges>: "standardcharges"
- [json|xml|csv]: Your chosen file format.

Step 6: Post your machine-readable file prominently on a publicly available website⁹

You must post your hospital's machine-readable file of all items and services on a publicly available website, and the information displayed must clearly identify the hospital location with which the standard charges are associated, be easily accessible, and without barriers.

⁷ Refer to 45 CFR §180.50(c).

⁸ Refer to § 180.50(d)(5).

⁹ Refer to § 180.50(d).

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Furthermore, the information must:

- Be free of charge;
- Require no registration or user account or password;
- Not request personally identifying information (PII);
- Be contained in a single digital file;
- Be accessible to automated searches; and
- Be accessible to direct file downloads through a link posted on a publicly available website

Step 7: Update your comprehensive machine-readable file annually¹⁰

Your hospital must update its standard charge information for its comprehensive machine-readable file at least once annually and clearly indicate the date that your hospital most recently updated the information.

Step 8: Double check that you've met the requirements.

CMS developed a Hospital Price Transparency Checklist¹¹ to help you double check all the requirements. This should not be interpreted as a substitute for reading and meeting the requirements of the regulations at 45 C.F.R. Part 180 rule. This brief checklist along with this document are meant to assist your review of the comprehensive machine-readable file you prepare to make public the standard charges and associated data elements.

¹⁰ Refer to 45 CFR § 180.50(e)(5).

¹¹ <https://www.cms.gov/files/document/hospital-price-transparency-final-rule-quick-reference-checklists.pdf>