



Medicare Durable Medical Equipment, Devices & Supplies Technical Specifications

August, 2021

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Referring Durable Medical Equipment, Prosthetics, Orthotics and Supplies Public Use File Technical Specifications

This programming specifications appendix provides users with additional information about how the Referring Provider Durable Medical Equipment, Prosthetics, Orthotics and Supplies (DMEPOS) Public Use File (PUF) was developed. It describes the source data used in creating the file, including any supplemental information beyond the Medicare fee-for-service claims. This document also describes the step-by-step methodology CMS used to create the Referring Durable Medical Equipment, Prosthetics, Orthotics and Supplies PUF.

Source Data:

1. [*CMS Durable Medical Equipment, Prosthetic, Orthotic and Other Supplies \(DMEPOS\) Calendar Year Data*](#)
2. [*CMS National Plan and Provider Enumeration System \(NPPES\) Name and Address Data*](#) The most current NPPES name and address information for active NPIs is in the “NPPES Data Dissemination (month, DD, YYYY)” full NPI replacement file.
3. [*CMS Health Care Common Procedure Coding System \(HCPCS\) Level II Descriptions*](#) The HCPCS Level II crosswalk is titled “**** Alpha-Numeric HCPCS File” (where **** = the year of the DMEPOS calendar year data).
4. [*CMS Carrier Calendar Year Data*](#)
5. [*CMS Provider Specialty Descriptions*](#) The provider specialty crosswalk is titled “Crosswalk Medicare Provider/Supplier to Healthcare Provider Taxonomy”.
6. [*National Uniform Claim Committee \(NUCC\) Taxonomy Code Set*](#)

Methodology:

Step 1: Create the following variables from the CMS DMEPOS Calendar data:

- **Referring_NPI** = DMEPOS Claim Referring NPI Number(RFR_NPI)
- **Supplier_NPI** = DMEPOS Line Supplier NPI Number(SUP_NPI)
- **Hcpcs_code** = Health Care Common Procedure Coding System (HCPCS_CD)
- **betos_classification** = Line NCHBETOS Code (BETOS)
- Derive **betos_classification** = 'DME' when Line NCHBETOS Code (BETOS) contains one of the following values: 'D1A','D1B','D1C','D1D','D1E','D1G'; otherwise **betos_classification** = 'POS' when Line NCHBETOS Code (BETOS) = 'D1F'; otherwise **betos_classification** = 'OTH'
- Derive **supplier_rental_indicator** = 'Y' when Line HCPCS Initial Modifier Code (MDFR_CD1) = 'RR' or Line HCPCS Second Modifier Code (MDFR_CD2) = 'RR'; otherwise **supplier_rental_indicator** = 'N'
- **Provider_specialty_code** = Line HCFA Provider Specialty Code (HCFASPCL)
- **line_srvc_cnt** = Line Service Count (SRVC_CNT)
- **submitted_chrg_amt** = Line Submitted Charge Amount (LSBMTCHG)
- **Medicare_allowed_amt** = Line Allowed Charge Amount (LALOWCHG)
- **Medicare_payment_amt** = Line Provider Payment Amount (LPRVPMT)
- **Bene_id** = Encrypted CCWBeneficiary ID(BENE_ID)
- **Claim_id** = Claim Id (CLM_ID)

Step 2: Summarize the following variables from Step 1 to the **Referring_NPI, hcpcs_code, supplier_rental_indicator**:

- **Number_of_suppliers** = distinct count of Supplier_NPI
- **Number_of_suppliers_beneficiaries** = distinct count of bene_id
- **Number_of_supplier_claims** = distinct count of clm_id
- **Number_of_supplier_services** = sum of line_srvc_cnt
- **Avg_supplier_submitted_charge** = sum of submitted_chrg_amt / sum of line_srvc_cnt
- **Avg_supplier_Medicare_allow_amt** = sum of Medicare_allowed_amt / sum of line_srvc_cnt
- **Avg_supplier_Medicare_pmt_amt** = sum of Medicare_payment_amt / sum of line_srvc_cnt

Step 3: Merge output from Step 2 (retaining all data if match) using **referring_NPI** with NPPES Name and Address data using **NPI** and attach the following:

- **referring_provider_last_org_name** = Provider Organization Name (Legal Business Name) when Entity Type Code = 'O'; else Provider Last Name (Legal Name) when Entity Type Code = 'I'
- **referring_provider_first_name** = Provider First Name
- **referring_provider_mi** = Provider Middle Name
- **referring_credentials** = Provider Credential Text
- **referring_provider_gender** = Provider Gender Code
- **referring_entity_code** = Entity Type Code
- **referring_provider_street1** = Provider First Line Business Practice Location Address

- **referring_provider_street2** = Provider Second Line Business Practice Location Address
- **referring_provider_city** = Provider Business Practice Location Address City Name
- **referring_provider_state** = Provider Business Practice Location Address State Name
- **referring_provider_zip** = Provider Business Practice Location Address Postal Code
- **referring_provider_country** = Provider Business Practice Location Address Postal Code
- Derive **referring_provider_taxonomy_code** = Taxonomy Code when associated Primary Taxonomy = 'Y'

Step 4: Merge output from Step 3 (retaining all data) with CMS HCPCS Level II Description data using **hcpcs_code** and attach the following:

- **hcpcs_description** = LONGDESCRIPTION

Step 5: Derive a single **referring_provider_type** and **referring_provider_type_flag** based on the hierarchy described below.

a. CMS Carrier Calendar data:

- Extract the following variables from the CMS Carrier data
 - **NPI** = Carrier Line Performing NPI Number (PRFNPI)
 - **Provider_specialty_code** = Line HCFA Provider Specialty Code (HCFASPCL)
 - **line_srvc_cnt** = Line Service Count (SRVC_CNT)
- Derive a single **provider_specialty_code** for each **NPI** record based on the **provider_specialty_code** associated with the maximum **line_srvc_cnt**
- Derive **referring_provider_type** = "Medicare Provider/Supplier Type Description" from CMS Provider Specialty Descriptions using **provider_specialty_code**

b. CMS DMEPOS Calendar data:

- Derive from Step 1 a single **provider_specialty_code** for each **supplier_NPI** record based on the **provider_specialty_code** associated with the maximum **line_srvc_cnt**
- Derive **referring_provider_type** = "Medicare Provider/Supplier Type Description" from CMS Provider Specialty Descriptions using **provider_specialty_code**

c. Merge output from Step 5 a. using **NPI** with the output from Step 5 b. using **supplier_NPI**.

- Derive a single **NPI** with **Referring_provider_type** = referring_provider_type from Step 5 a.; otherwise **Referring_provider_type** = referring_provider_type from Step 5 b.
- Set **referring_provider_type_flag** = 'S'

Step 6: Merge the **referring_NPI** from the output from Step 4 (retaining all records) with the **NPI** from the output from Step 5 c.:

- If **referring_NPI** from the output from Step 4 = **NPI** from the output from Step 5 c. then attach **referring_provider_type** and **referring_provider_type_flag**;

otherwise

When **referring_provider_taxonomy_code** crosswalks to a single “Medicare Provider/Supplier Type Description” from CMS Provider Specialty Descriptions then derive **referring_provider_type** = “Medicare Provider/Supplier Type Description” and **referring_provider_type_flag** = 'S';

otherwise

Derive **referring_provider_type** = “Classification” from the NUCC Taxonomy Set using **referring_provider_taxonomy_code** and set **referring_provider_type_flag** = 'T'