



Medicare Fee-For Service
Provider Utilization & Payment Data
Inpatient
Public Use File:
Technical Specifications

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Inpatient Public Use File Technical Specifications

This programming specifications document provides users with additional information about how the Inpatient 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 Inpatient datasets.

Source Data:

1. **CMS MedPAR Calendar Year Discharge Data** see: <https://www.resdac.org/cms-data/files/medpar/data-documentation>.
2. **CMS Medicare Severity Diagnosis-Related Group (MS-DRG) Descriptions** available at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Acute-Inpatient-Files-for-Download.html?DLSort=1&DLEntries=10&DLPage=2&DLSortDir=ascending>. The MS-DRG crosswalk is in Table 5 of the “Files for FY **** Final Rule and Correction Notice” (where **** = year of the MedPAR discharge data).
3. **CMS Provider of Service (POS) Data** available at: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/NonIdentifiableDataFiles/ProviderofServicesFile.html>. The year of POS data should be the year following the year of the MedPAR discharge data (i.e., if the discharge data is from 2012, the POS file should be from 2013).

Methodology:

Step 1: Limit CMS MedPAR discharge data to fee-for-service short-stay hospital discharges associated with ‘IPPS’ hospitals using the following criteria:

- MEDPAR NCH claim type code (CLM_TYPE) = ‘60’
- MEDPAR short-stay/long-stay/snf indicator (SSLSSNF) = ‘S’ (*Identifies Short Stay*)
- MEDPAR GHOP Paid Code (GHOPDCD) **NOT** = ‘1’ (*To exclude Managed Care*)
- MEDPAR provider number special unit code (SPCLUNIT) = ‘ ’ (*To exclude units within a hospital*)
- MEDPAR Indirect Medical Education Amount (IME_AMT) **NOT** equal MEDPAR DRG Price Amount (DRGPRICE)
- MEDPAR Length of Stay Day Count (LOSCNT) > 0
- MEDPAR Total Charge Amount (TOTCHRG) > 0
- Third position of the MEDPAR provider number (PRVDRNUM) = ‘0’ (*Identifies IPPS hospitals*)
- Fifth position of the MEDPAR provider number (PRVDRNUM) **NOT** = ‘V’ (*To exclude Veterans’ Administration demonstration claim*)
- Sixth position of the MEDPAR provider number (PRVDRNUM) **NOT** = ‘E’ (*To exclude Medicare non-participating, non-federal emergency hospital*)
- Sixth position of the MEDPAR provider number (PRVDRNUM) **NOT** = ‘F’ (*To exclude Medicare non-participating, federal emergency hospital*)
- The MEDPAR provider number is **NOT** any of the following (*To exclude Cancer hospitals*):
 - ‘050146’
 - ‘050660’
 - ‘220162’

- '330154'
- '330354'
- '360242'
- '390196'
- '450076'
- '100079'
- '100271'
- '500138'

For the Medicare Inpatient Hospitals by Provider and Service, and the Medicare Inpatient Hospitals by Geography and Service Datasets:

Step 2: Extract the following variables from the output from step 1:

- **Provider Id** = MEDPAR Provider Number (PRVDR_NUM)
- **DRG Code** = MEDPAR DRG Code (DRG_CD)
- **Covered Charges** = MEDPAR Total Covered Charge Amount (TOT_CVR_CHRG_AMT)
- Derive **Total Payments** = MEDPAR Total Pass Through Amount (PASS_THRU_AMT) + MEDPAR DRG Price Amount (DRG_PRICE_AMT) + MEDPAR DRG Outlier Approved Payment Amount (DRG_OUTLIER_PMT_AMT)
- **Medicare Payments** = MEDPAR Medicare Payment Amount (MDCR_PMT_AMT)
- Derive **Total Discharges** = 1

Step 3: Merge output from step 2 data with MS-DRG Description data by **DRG Code** and attach the following:

- Derive **DRG Definition** by concatenating the DRG_Code and MS-DRG Title

Step 4: Merge output from step 3 with CMS POS data by **Provider Id** and attach the following:

- **Provider Name** = FAC_NAME
- **Provider Street Address** = ST_ADR
- **Provider City** = CITY_NAME
- **Provider State** = STATE_CD
- **Provider Zip Code** = ZIP_CD

Step 5: Summarize **Total Discharges**, **Total Charge Amount**, **Total Payments** and **Medicare Payment Amount** from the output from step 4 to the following:

- **DRG Definition**
- **Provider Number**
- **Provider Name**
- **Provider Street Address**
- **Provider City**
- **Provider State**
- **Provider Zip Code**

Step 6: Limit the output from step 5 as follows:

- **Provider State** within the 50 United States and District of Columbia

Step 7: Calculate averages from the output from step 6:

- Derive **Average Covered Charges** = Total Covered Charge Amount / Total Discharges
- Derive **Average Total Payments** = Total Payments / Total Discharges
- Derive **Average Medicare Payments** = Medicare Payment Amount / Total Discharges

For the Medicare Inpatient Hospitals by Provider dataset:

Step 8: Limit the output from step 1 as follows:

- **Provider State** within the 50 United States and District of Columbia

Step 9: Match the output from step 8 to the CCW Beneficiary Enrollment File, on BENE_ID, to obtain the following beneficiary characteristics:

- Age (AGE)
- Race (RACE_CD)
- Sex (SEX)
- Dual Medicare/Medicaid Status (DUAL_IND)
- The following 16 Chronic Condition indicators:
 - Atrial Fibrillation (AFIB_FLAG)
 - Alzheimer's Disease (ALZRDSD_FLAG)
 - Asthma (ASTHMA_FLAG)
 - Cancer (CANCER_FLAG)
 - Congestive Heart Failure (CHF_FLAG)
 - Chronic Kidney Disease (CKD_FLAG)
 - Chronic Obstructive Pulmonary Disease (COPD_FLAG)
 - Depression (DEPR_FLAG)
 - Diabetes (DIAB_FLAG)
 - Hyperlipidemia (HYPERL_FLAG)
 - Hypertension (HYPERT_FLAG)
 - Ischemic Heart Disease (IHD_FLAG)
 - Osteoporosis (OST_FLAG)
 - Rheumatoid Arthritis/Osteoarthritis (RAOA_FLAG)
 - Schizophrenia (SCHLOT_FLAG)
 - Stroke (STRK_FLAG)
- **Step 10:** Per the first 4 of the beneficiary characteristics from step 9 (Age, Race, Sex, Dual Status), summarize the following counts/amounts to the Provider_Id level:
 - Total Covered Charges (TOT_CVR_CHRG_AMT)
 - Total Payment Amount (TOTAL_PMT_AMT)
 - Total Covered Days (COVERED_DAYS)

- Total Days (TOTAL_DAYS)
 - Total Medicare Payment Amount (CLAIM_PMT_AMT)
 - Total Discharges (DISCHARGE_COUNT)
 - Number of Medicare Beneficiaries (PERSONS_SERVED)
- **Step 11:** Per the 16 Chronic Condition flags described in step 9, calculate the percentage of beneficiaries with covered services, to the Provider_Id level; for privacy purposes, this percentage is limited (top-coded) to 75%