

Medicare Fee-For Service Provider Utilization & Payment Data Part D Prescriber Public Use File: A Methodological Overview

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Prepared by:
The Centers for Medicare and Medicaid Services,
Office of Enterprise Data and Analytics

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1. Background

The Part D Prescriber Public Use File (herein referred to as the "Part D Prescriber PUF") provides information on prescription drug events (PDEs) incurred by Medicare beneficiaries with a Part D prescription drug plan. The Part D Prescriber PUF is organized by National Provider Identifier (NPI) and drug name and contains information on drug utilization (claim counts and day supply) and total drug costs. The data in the Part D Prescriber PUF cover calendar years 2013 and 2014.

2. Key data sources

The primary data source for these data is the CMS Chronic Conditions Data Warehouse which contains Medicare Part D PDE records received through the claims submission cut-off date. The submission cut-off date is June 30th following the end of the preceding calendar year. For instance, the 2014 Part D Prescriber PUF includes PDEs received through June 30, 2015. These data contain 100 percent of Medicare Part D final-action (i.e., all claim adjustments received through the cut-off date have been resolved) PDE records for beneficiaries who are enrolled in the Part D program. Beneficiary counts, claim counts, and total drug costs are summarized from these PDE data. PDE records for over-the-counter drugs (indicated by drug coverage status code ="O"), which may be found in the PDE data due to their inclusion in an approved step-therapy protocols, are excluded from all summarizations. Drug brand names and generic names used in the summarization are appended to PDE records from First Databank's MedKnowledgeTM drug information database by linking via National Drug Codes (NDCs). A small proportion of PDE records with NDCs that do not match to First Databank's drug information are excluded from all summarizations beginning with calendar year 2014 data.

Prescriber demographics are also incorporated in the Part D Prescriber PUF including name, credentials, gender, complete address and entity type from the National Plan & Provider Enumeration System (NPPES). The health care provider's demographic information is collected at the time of enrollment and updated periodically. The demographic information provided in the Part D Prescriber PUF is based upon information extracted from NPPES as of the end of the subsequent calendar year (e.g., The 2014 Part D Prescriber PUF includes NPPES information as of the end of calendar year 2015). For additional information on NPPES, please visit https://nppes.cms.hhs.gov/NPPES/Welcome.do.

3. Population

The Part D Prescriber PUF is based on beneficiaries enrolled in the Medicare Part D prescription drug program who comprise approximately 70 percent of all Medicare beneficiaries. Approximately two-thirds of Part D beneficiaries are enrolled in stand-alone Prescription Drug Plans (PDP) with the remaining one third enrolled in Medicare Advantage Prescription Drug (MAPD) plans.

The Part D Prescriber PUF is restricted to prescribers who had a valid NPI and who were included on Medicare Part D PDEs submitted by the Part D plan sponsors during the calendar year. The dataset contains information predominantly from individual providers, but also includes a small proportion of organizational providers, such as nursing homes, group practices, non-physician practitioners, residential treatment facilities, ambulatory surgery centers and other providers.

4. Aggregation

The spending and utilization data in the Part D Prescriber PUF are aggregated to the following:

- a) the NPI of the prescriber, and
- b) the drug name (brand name in the case of brand drugs) and generic name.

Each record in the dataset represents a distinct combination of NPI, drug (brand) name, and generic name. There can be multiple records for a given NPI based on the number of distinct drugs that were filled. For each prescriber and drug, the dataset includes the total number of prescriptions that were dispensed, (including original prescriptions and any refills), total day's supply for these prescriptions, and the total drug cost. To protect the privacy of Medicare beneficiaries, any aggregated records which are derived from 10 or fewer claims are excluded from the Part D Prescriber PUF. Please see the section on Limitations for additional information about data redactions and suppression in the Part D Prescriber PUF.

5. Data Contents

5.1 Detailed Data File

Providers with fewer than 11 claims are not included in the data file. The following variables are included in the Part D Prescriber PUF detail data file:

npi – National Provider Identifier (NPI) for the performing provider on the claim.

nppes_provider_last_org_name – When the provider is registered in NPPES as an individual (entity type code='I'), this is the provider's last name. When the provider is registered as an organization (entity type code = 'O'), this is the organization name.

nppes_provider_first_name – When the provider is registered in NPPES as an individual (entity type code='I'), this is the provider's first name. When the provider is registered as an organization (entity type code = 'O'), this will be blank.

nppes_provider_city – The city where the provider is located, as reported in NPPES.

nppes_provider_state – The state where the provider is located, as reported in NPPES. The fifty U.S. states and the District of Columbia are reported by the state postal abbreviation. The following values are used for other areas:

'XX' = 'Unknown'

'AA' = 'Armed Forces Central/South America'

'AE' = 'Armed Forces Europe'

'AP' = 'Armed Forces Pacific'

'AS' = 'American Samoa'

'GU' = 'Guam'

'MP' = 'North Mariana Islands'

'PR' = 'Puerto Rico'

'VI' = 'Virgin Islands'

'ZZ' = 'Foreign Country'

specialty_description – Derived from the Medicare provider/supplier specialty code reported on the NPI's Part B claims. For providers that have more than one Medicare specialty code reported on their claims, the Medicare specialty code associated with the largest number of services is reported. Where a prescriber's NPI did not have associated Part B claims, the taxonomy code associated with the NPI in NPPES is mapped to a Medicare specialty code using an external crosswalk published here:

http://www.cms.gov/Medicare/Provider-Enrollment-and-

<u>Certification/MedicareProviderSupEnroll/Taxonomy.html</u></u>. For any taxonomy codes that could not be mapped to a Medicare specialty code, the taxonomy classification description from the National Uniform Claim Committee (NUCC) taxonomy code set is used. For more information on the NUCC taxonomy code set, please visit:

http://www.nucc.org/index.php?option=com_content&view=article&id=107&Itemid=132.

description_flag – A flag that indicates the source of the *specialty description*.

"S" = Medicare Specialty Code description

"T" = Taxonomy Code Classification description.

drug_name – The name of the drug filled. This includes both brand names (for drugs that have patent protection) and generic names (for drugs that no longer have patent protection). In the calendar year 2013 data, there are a proportion of cases where the drug name and generic name could not be determined from the NDC on the PDE record. In these instances, the drug name is blank.

generic_name – A term referring to the chemical ingredient of a drug rather than the advertised brand name under which the drug is sold. In the CY2013 data, there are a small proportion of cases where the drug name and generic name could not be determined from the NDC on the PDE record. In these instances, the generic name is blank.

bene_count – The total number of unique Medicare Part D beneficiaries with at least one claim for the drug. Counts fewer than 11 are suppressed and are indicated by a blank.

total_claim_count – The number of Medicare Part D claims. This includes original prescriptions and refills. Aggregated records based on *total claim count* fewer than 11 are not included in the data file.

total_day_supply – The aggregate number of day's supply for which this drug was dispensed.

total_drug_cost – The aggregate total drug cost paid for all associated claims. This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. The total drug cost is based on the amounts paid by the Part D plan, Medicare beneficiary, government subsidies, and any other third-party payers.

bene_count_ge65 – The total number of unique Medicare Part D beneficiaries age 65 and older with at least one claim for the drug. A blank indicates the value is suppressed. See bene_count_ge65_suppress_flag regarding suppression of data.

bene_count_ge65_suppress_flag – A flag indicating the reason the **bene_count_ge65** variable is suppressed.

- "*" = Primary suppressed due to bene_count_ge65 between 1 and 10.
- "#" = Counter suppressed because the "less than 65 year old" group (not explicitly displayed) contains a beneficiary count between 1 and 10, which can be mathematically determined from bene count ge65 and bene count.

total_claim_count_ge65 – The number of Medicare Part D claims for beneficiaries age 65 and older. This includes original prescriptions and refills. A blank indicates the value is suppressed. See **ge65_suppress_flag** regarding suppression of data.

ge65_suppress_flag – A flag that indicates the reason the total_claim_count_ge65, total_drug_cost_ge65, and total_day_supply_ge65 variables are suppressed.

- "*" = Primary suppressed due to total_claim_count_ge65 between 1 and 10.
- "#" = Counter suppressed because the "less than 65 year old" group (not explicitly displayed) contains a small claim count between 1 and 10, which can be mathematically determined from the total_claim_count_ge65 and total_claim_count.

total_day_supply_ge65 – The aggregate number of day's supply for which this drug was dispensed, for beneficiaries age 65 or older. If total_claim_count_ge65 is suppressed, this variable is suppressed. A blank indicates the value is suppressed. See ge65_suppress_flag regarding suppression of data.

total_drug_cost_ge65 – The aggregate total drug cost paid for all associated claims for beneficiaries aged 65 and older. This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. If **total_claim_count_ge65** is suppressed, this variable is suppressed. A blank indicates the value is suppressed. See **ge65_suppress_flag** regarding suppression of data.

5.2 Summary Tables

Two summary type tables have been created to supplement the information reported in the Part D Prescriber PUF detail data described above: 1) aggregated information at the prescriber-level (i.e. one summary record per NPI) that includes enhanced prescriber demographic information beyond what is provided in the Prescriber PUF detail data; and 2) aggregated drug information at the State/National,

brand name and generic name level. The aggregated summary tables are not restricted to the redacted data reported in the Part D Prescriber PUF but are aggregated based on all Medicare Part D PDE data.

Part D Prescriber Summary Table

The "Part D Prescriber Summary Table" contains overall drug utilization (claims and day's supply), drug costs and beneficiary counts organized by NPI. Drug utilization, drug costs and beneficiary counts are also included for each of the following sub group classifications:

- Beneficiaries Age 65 and older;
- Brand name, generic name and other;
- Medicare Advantage Prescription Drug (MAPD) and stand-alone Prescription Drug Plans (PDP);
- Low-income subsidy and no low-income subsidy; and
- High-risk medications in the elderly, opioids, antibiotics, and antipsychotics.

The following variables correspond to the same variables reported in the Part D Prescriber PUF detail data. See "5.1 Detailed Data File" section above for descriptions:

npi nppes_provider_last_org_name nppes_provider_first_name nppes_provider_city nppes_provider_state specialty_description description_flag bene_count total_claim_count total_day_supply total_drug_cost bene_count_ge65 bene_count_ge65_suppress_flag total_claim_count_ge65 ge65_suppress_flag total_drug_cost_ge65 total_day_supply_ge65

The following variables are specific to the "Part D Prescriber Summary Table":

nppes_provider_mi – When the provider is registered in NPPES as an individual (entity type code='I'), this is the provider's middle initial. When the provider is registered as an organization (entity type code = 'O'), this will be blank.

nppes_credentials – When the provider is registered in NPPES as an individual (entity type code='I'), these are the provider's credentials. When the provider is registered as an organization (entity type code = 'O'), this will be blank.

nppes_provider_gender – When the provider is registered in NPPES as an individual (entity type code='I'), this is the provider's gender. A value of 'M' indicates male and a value of 'F' indicates females. When the provider is registered as an organization (entity type code = 'O'), this will be blank.

nppes_entity_code – Type of entity reported in NPPES. An entity code of '1' identifies providers registered as individuals and an entity type code of 'O' identifies providers registered as organizations.

nppes_provider_street1 - The first line of the provider's street address, as reported in NPPES.

nppes_provider_street2 – The second line of the provider's street address, as reported in NPPES.

nppes_provider_zip5 - The first 5 digits of the provider's zip code, as reported in NPPES.

nppes_provider_zip4 – The 6th through 9th digits of the provider's zip code, as reported in NPPES.

nppes_provider_country – The country where the provider is located, as reported in NPPES. The country code will be 'US' for any state or U.S territory. For foreign countries (i.e., state values of 'ZZ'), the provider country values may include the following:

'IS'= 'Iceland' 'AE' = 'United Arab Emirates' 'Al' = 'Anguilla' 'IT'= 'Italy' 'AR'= 'Argentina' 'JO' = 'Jordan' 'AU'= 'Australia' 'JP'= 'Japan' 'BH' = 'Bahrain' 'KR'= 'Korea' 'BM' = 'Bermuda' 'KW' = 'Kuwait' 'BR'= 'Brazil' 'KY' = 'Cayman Islands' 'CA'= 'Canada' 'LY' = 'Libya' 'CH'= 'Switzerland' 'MG' = 'Madagascar' 'CN'= 'China' 'MX' = 'Mexico' 'CO'= 'Colombia' 'NL'= 'Netherlands' 'DE'= 'Germany' 'NO' = 'Norway' 'EC' = 'Ecuador' 'NZ' = 'New Zealand' 'EG' = 'Egypt' 'OM' = 'Oman' 'ES'= 'Spain' 'PA' = 'Panama' 'FR'= 'France' 'PK'= 'Pakistan' 'GB'= 'Great Britain' 'SA'= 'Saudi Arabia' 'SE'= 'Sweden' 'GR' = 'Greece' 'HU'= 'Hungary' 'TH' = 'Thailand' 'IE' = 'Ireland' 'TR'= 'Turkey' 'IL'= 'Israel' 'UG' = 'Uganda' 'IN'= 'India' 'VE'= 'Venezuela' 'IQ' = 'Iraq' 'ZA' = 'South Africa'

medicare_prvdr_enroll_status – A status to indicate whether the prescriber is enrolled in the Medicare Program. **Note:** This variable is available starting with the calendar year 2014 data.

- 'E' = Providers who are enrolled in the Medicare Program as of end of the data reporting year.
- 'N' = Providers who are not enrolled in the Medicare Program as of the end of the data reporting year.
- 'O' = Providers who did not wish to enroll in the Medicare program as of end of the data reporting year but have signed a written affidavit to opt out that states neither the provider nor the beneficiary can receive payment from Medicare for services performed.

brand_claim_count – Total claims of brand-name drugs, including refills. This is based on the Food and Drug Administration approval category of New Drug Application (NDA), NDA authorized generic, or Biologic License Application (BLA). A blank indicates the value is suppressed. See **brand_suppress_flag** regarding suppression of data.

brand_suppress_flag – A flag indicating the reason the **brand_claim_count** and **brand_drug_cost** variables are suppressed.

- "*" = Primary suppressed due to brand_claim_count between 1 and 10.
- "#" = Counter suppressed because the claim count from at least one of the corresponding claim count categories (*generic_claim_count* or *other_claim_count*) is between 1 and 10. Counter suppression prevents the disclosure of a primary suppressed value when all categories sum to the total value.

brand_drug_cost – Aggregate total drug cost paid for brand-name drugs. This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. This is based on the Food and Drug Administration approval category of NDA, NDA authorized generic, or BLA. If brand_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. See brand_suppress_flag regarding suppression of data.

generic_claim_count – Total claims of generic drugs, including refills. This is based on the Food and Drug Administration approval category of Abbreviated New Drug Application (ANDA). A blank indicates the value is suppressed. See *generic_suppress_flag* regarding suppression of data.

generic_suppress_flag – A flag indicating the reason the *generic_claim_count* and *generic_drug_cost* variables are suppressed.

- "*" = Primary suppressed due to *generic_claim_count* between 1 and 10.
- "#" = Counter suppressed because the claim count from at least one of the corresponding claim count categories (brand_claim_count or other_claim_count) is between 1 and 10. Counter suppression prevents the disclosure of a primary suppressed value when all categories sum to the total value.

generic_drug_cost – Aggregate cost paid for generic drugs. This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. This is based on the Food and Drug Administration approval category of ANDA. If **generic_claim_count** is suppressed this variable is

suppressed. A blank indicates the value is suppressed. See *generic_suppress_flag* regarding suppression of data.

other_claim_count - Total claims of other drugs, including refills. This is based any other Food and Drug Administration approval categories not included in the brand or generic definitions above. A blank indicates the value is suppressed. See **other_suppress_flag** regarding suppression of data.

other_suppress_flag — A flag indicating the reason other_claim_count and other_drug_cost variables are suppressed.

- "*" = Primary suppressed due to other_claim_count between 1 and 10.
- "#" = Counter suppressed because the claim count from at least one of the corresponding claim count categories (brand_claim_count or generic_claim_count) is between 1 and 10. Counter suppression prevents the disclosure of a primary suppressed value when all categories sum to the total value.

other_drug_cost – Aggregate cost paid for all other drugs not classified as brand or generic. This amount includes ingredient cost, dispensing fee and sales tax. This is based any other Food and Drug Administration approval categories not included in the brand or generic definitions above. If other_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. See other_suppress_flag regarding suppression of data.

mapd_claim_count – The number of claims for beneficiaries covered by MAPD plans. A blank indicates the value is suppressed. See *mapd_suppress_flag* regarding suppression of data.

mapd_suppress_flag – A flag indicating the reason the *mapd_claim_count* and *mapd_drug_cost* variables are suppressed.

- "*" = Primary suppressed due to mapd claim count between 1 and 10.
- "#" = Counter suppressed because the *pdp_claim_count* contains a claim count between 1 and 10, which can be mathematically determined from the *mapd_claim_count* and *total_claim_count*.

mapd_drug_cost — Aggregate cost paid for claims filled by beneficiaries in MAPD plans. This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. If mapd_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. See mapd_suppress_flag regarding suppression of data.

pdp_claim_count - The number of claims for beneficiaries covered by standalone PDPs. A blank indicates the value is suppressed. See pdp_suppress_flag regarding suppression of data.

pdp_suppress_flag – A flag indicating the reason the *pdp_claim_count* and *pdp_drug_cost* variables are suppressed.

"*" = Primary suppressed due to pdp_claim_count between 1 and 10.

"#" = Counter suppressed because the mapd_claim_count contains a claim count between 1 and 10, which can be mathematically determined from the pdp_claim_count and total_claim_count.

pdp_drug_cost – Aggregate total drug cost paid for claims filled by beneficiaries in standalone PDPs.
This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. If pdp_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. See pdp_suppress_flag regarding suppression of data.

lis_claim_count – Total number of claims from this prescriber, including refills, for beneficiaries with a Part D low-income subsidy. A blank indicates the value is suppressed. See *lis_suppress_flag* regarding suppression of data.

lis_suppress_flag – A flag indicating the reason the *lis_claim_count* and *lis_drug_cost* variables are suppressed.

- "*" = Primary suppressed due to lis_claim_count between 1 and 10.
- "#" = Counter suppressed because *nonlis_claim_count* contains a claim count between 1 and 10, which can be mathematically determined from the *lis_claim_count* and *total_claim_count*.

lis_drug_cost – Aggregate total drug cost paid for claims for beneficiaries with a Part D low-income subsidy. This amount includes ingredient cost, dispensing fee and sales tax. If *lis_claim_count* is suppressed this variable is suppressed. A blank indicates the value is suppressed. See *lis_suppress_flag* regarding suppression of data.

nonlis_claim_count – Total number of claims from this prescriber, including refills, for beneficiaries without a Part D low-income subsidy. A blank indicates the value is suppressed. See nonlis_suppress_flag regarding suppression of data.

nonlis_suppress_flag – A flag indicating the reason the *nonlis_claim_count* and *nonlis_drug_cost* variables are suppressed.

- "*" = Primary suppressed due to nonlis_claim_count between 1 and 10.
- "#" = Counter suppressed because *lis_claim_count* contains a claim count between 1 and 10, which can be mathematically determined from the *nonlis_claim_count* and *total_claim_count*.

nonlis_drug_cost – Aggregate total drug cost paid for claims for beneficiaries without a Part D low-income subsidy. This amount includes ingredient cost, dispensing fee, sales tax, and any applicable vaccine administration fees. If *nonlis_claim_count* is suppressed this variable is suppressed. A blank indicates the value is suppressed. See *nonlis suppress flag* regarding suppression of data.

opioid_bene_count – The total number of unique Medicare Part D beneficiaries with at least one opioid claim. The opioid_bene_count is suppressed when opioid_bene_count is between 1 and 10. A blank indicates the value is suppressed. For list of drug names that include opioids, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-

<u>Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip</u>. **Note:** This variable is available starting with the calendar year 2014 data.

opioid_claim_count – Total claims of opioid drugs, including refills. The opioid_claim_count is suppressed when opioid_claim_count is between 1 and 10. A blank indicates the value is suppressed. For list of drug names that include opioids, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

opioid_drug_cost – Aggregate cost paid for opioid drugs. This amount includes ingredient cost, dispensing fee and sales tax. If opioid_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. For list of drug names that include opioids, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

opioid_day_supply – The aggregate number of day's supply for opioid drugs. If opioid_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. For list of drug names that include opioids, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

antibiotic_bene_count – The total number of unique Medicare Part D beneficiaries with at least one antibiotic claim. The antibiotic_bene_count is suppressed when antibiotic_bene_count is between 1 and 10. A blank indicates the value is suppressed. For list of drug names that include antibiotics, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

antibiotic_claim_count – Total claims of antibiotic drugs, including refills. The antibiotic_claim_count is suppressed when antibiotic_claim_count is between 1 and 10. A blank indicates the value is suppressed. For list of drug names that include antibiotics, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

antibiotic_drug_cost — Aggregate cost paid for antibiotic drugs. If antibiotic_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. For list of drug names that include antibiotics, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip.Note: This variable is available starting with the calendar year 2014 data.

hrm_bene_count_ge65 – The total number of unique Medicare Part D beneficiaries 65 and older with at least one high-risk medication claim. A blank indicates the value is suppressed. See hrm_bene_ge65_suppress_flag regarding suppression of data. For list of drug names that include high risk medication in the elderly, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

hrm_bene_ge65_suppress_flag — A flag indicating the reason the hrm_bene_count_ge65 variable is suppressed. For list of drug names that include high risk medication in the elderly, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

- "*" = Primary suppressed due to hrm_bene_count_ge65 counts between 1 and 10.
- "#" = Counter suppressed because the bene_count_ge65 is suppressed. See bene_count_ge65_suppress_flag regarding suppression of bene_count_ge65.

hrm_claim_count_ge65 – Total claims of high-risk medication drugs, including refills for beneficiaries 65 and older. A blank indicates the value is suppressed. See hrm_ge65_suppress_flag regarding suppression of data. For list of drug names that include high risk medication in the elderly, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

hrm_ge65_suppress_flag – A flag indicating the reason the hrm_claim_count_ge65 and hrm_drug_cost_ge65 variables are suppressed. For list of drug names that include high risk medication in the elderly, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

- "*" = Primary suppressed due to hrm_claim_count_ge65 between 1 and 10.
- "#" = Counter suppressed because *claim_count_ge65* is suppressed. See *ge65_suppress_flag* regarding suppression of *claim_count_ge65*.

hrm_drug_cost_ge65 – Aggregate cost paid for high-risk medication drugs for beneficiaries 65 and older. If hrm_claim_count_ge65 is suppressed this variable is suppressed. A blank indicates the value is suppressed. See hrm_ge65_suppress_flag regarding suppression of data. For list of drug names that include high risk medication in the elderly, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

anti_psych_bene_count - The total number of unique Medicare Part D beneficiaries with at least one anti-psychotic claim. The anti_psych_bene_count is suppressed when anti_psych_bene_count is between 1 and 10. A blank indicates the value is suppressed. For list of drug names that include antipsychotics, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. **Note:** This variable is available starting with the calendar year 2014 data.

anti_psych_claim_count – Total claims of antipsychotic drugs, including refills. The anti_psych_claim_count is suppressed when anti_psych_claim_count is between 1 and 10. A blank indicates the value is suppressed. For list of drug names that include antipsychotics, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

anti_psych_drug_cost — Aggregate cost paid for anti-psychotic drugs. If anti_psych_claim_count is suppressed this variable is suppressed. A blank indicates the value is suppressed. For list of drug names that include antipsychotics, visit https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/PartD_DrugCatList_2014.zip. Note: This variable is available starting with the calendar year 2014 data.

Part D Prescriber National/State Summary Tables

The "Part D Prescriber National/State Summary Tables" contain information on number of beneficiaries, number of prescribers, total drug claims and total drug costs organized by drug name and generic name in the national table and organized by provider state, drug name and generic name in the state table.

More detailed information on the Part D Prescriber National/State Summary tables are provided in the Methodology and Documentation tabs of each summary file.

6. Data Limitations

Although the Part D Prescriber PUF has a wealth of payment and utilization information about Medicare prescription drug events (PDEs), the dataset also has a number of limitations that are worth noting. First, the information presented in this file does not indicate the quality of care provided by individual clinicians. Second, given that the data contain information only from Medicare beneficiaries with Part D coverage, but clinicians typically treat many other patients who do not have that form of coverage, the data in the Part D Prescriber PUF may not be representative of a prescriber's entire prescribing pattern nor be fully inclusive of all prescriptions written by the provider. Additionally, the data in this file are limited to medications covered by the Part D program and drugs statutorily excluded by the Part D program which may be covered by individual Part D prescription drug plans through supplemental coverage. Since not all Part D plans have supplemental coverage for excluded products, utilization and cost statistics presented in the data likely underestimates the true use of these products in this population.

The total drug costs included in these data reflect the prescription drug costs incurred by Medicare Part D beneficiaries, including costs that are paid by Medicare, by beneficiaries, and by third-party payers. The Part D prescription drug program is administered by private Part D plan insurers. Medicare pays Part D plans a monthly, risk-adjusted capitation payment for each enrollee. Beneficiaries also pay a monthly premium. In addition, Medicare pays Part D plans additional subsidies to cover reduced cost-sharing for low-income beneficiaries and a portion of the costs for beneficiaries' whose drug costs are very high. Following each benefit year, CMS shares risk with plans by reconciling the capitation and various subsidy payments to actual drug cost expenditures determined from PDE records, and any manufacturer rebates or other direct and indirect remunerations received by the plan. Therefore, because the drug expenditures derived from the PDE data comprise only a piece of the payment process, it is not possible to directly attribute total drug costs at the prescriber or drug level to payments from the Medicare Trust Fund. Furthermore, these total drug costs do not reflect any manufacture rebates.

Also, there are known issues in the attribution of PDEs to a specific NPI. Some prescribers' claims may be listed under multiple NPIs, such as an organizational and individual NPI. In this case, users cannot determine a prescriber's actual total because it is not possible to identify the individual's portion when the claim is submitted under their organization. In addition, some of an individual's prescriptions might be erroneously attributed to a different prescriber due to errors that can occur in the transcription of prescriber information at the point-of-sale.

If users attempt to link data from these files to other public datasets, please be aware of the particular Medicare populations included and timeframes used in each file that will be merged, as well as the identifiers used to merge data. For example, efforts to link the Part D Prescriber data to the Physician and Other Supplier PUF data would need to account for the fact that some beneficiaries who have FFS Part B coverage (and are thus included in the Physician and Other Supplier PUF) do not have Part D drug coverage (and thus not represented in the Part D Prescriber PUF). At the same time, some beneficiaries that have Part D coverage (and are thus included in the Part D Prescriber PUF) do not have FFS Part B coverage (and thus not included in the Physician and Other Supplier PUF). Another example would be linking to data constructed from different or non-aligning time periods, such as publically available data on physician referral patterns, which is based on an 18-month period. Users attempting to merge data from the Part D Prescriber PUF to publicly available Open Payments data on financial relationships should be aware that NPIs are not available in the Open Payments data and thus merges must be conducted using text-string identification fields such as name and address.

Additional Information on Data Redaction and Suppression

As previously stated, the Part D Prescriber PUF detail file does not include drugs with fewer than 11 Part D drug claims, so users should be aware that summing data in detail file will underestimate the true Part D totals. In addition, in the detail file as well as the summary tables, beneficiary counts, claim counts, drug costs, and day's supply are suppressed if the value is between 1 and 10 and also may be removed for counter-suppression purposes. Since total claim counts are available on the files and some subgroups (e.g., brand, generic, and other) sum to the total claim count, if one of the sub-group

categories is suppressed because it has a claim count between 1 and 10 (primary suppression), then the next lowest claim count sub-group category must be suppressed to prevent disclosure of this primary suppressed value. Since only one sub-group category is suppressed, you can mathematically determine it using the values from the other claim count categories and the total claim count information. To help users understand the reasons for suppression, suppression flag variables are included.

Suppressed values represent values 1 to 10 and are indicated by a "blank" in the data files. When analyzing the data, users should note that excluding the suppressed values will result in estimates that are different from the true values. If users choose to retain the suppressed values in their analysis, please note that most statistical software packages will treat the "blanks" as "zeroes", resulting in underestimates of the true values. Alternatively, users may assign an imputed value of their choosing, e.g. five (5), for the suppressed value.

7. Updates

August 2016 Updates

We have updated the "Part D Prescriber Summary Table" (i.e., the NPI-level file) to include distinct beneficiary counts, total claim counts and total drug costs for opioids, antibiotics, antipsychotics, and high-risk medications among the elderly. In addition, a prescriber enrollment status flag has been added to indicate whether the prescriber is enrolled, not enrolled or opted out of the Medicare program.

These updates begin with calendar year 2014 data. Previous year's data have not been re-published with these changes.

APPENDIX A - File Attributes

Table 1. NPI / Drug Name / Generic Name Detail File Layout

#	Variable	Туре	Len	Label	Data Year Begin Date
1	npi	Char	10	National Provider Identifier	2013
2	nppes_provider_last_org_name	Char	70	Last Name/Organization Name of the Provider	2013
3	nppes_provider_first_name	Char	20	First Name of the Provider	2013
4	nppes_provider_city	Char	40	City of the Provider	2013
5	nppes_provider_state	Char	2	State Code of the Provider	2013
6	specialty_description	Char	75	Provider Specialty Type	2013
7	description_flag	Char	1	Source of Provider Specialty	2013
8	drug_name	Char	30	Brand Name	2013
9	generic_name	Char	30	USAN Generic Name - Short Version	2013
10	bene_count	Num	8	Number of Medicare Beneficiaries	2013
11	total_claim_count	Num	8	Number of Medicare Part D Claims, Including Refills	2013
12	total_day_supply	Num	8	Number of Day's Supply for All Claims	2013
13	total_drug_cost	Num	8	Aggregate Cost Paid for All Claims	2013
14	bene_count_ge65	Num	8	Number of Medicare Beneficiaries Age 65+	2013
15	bene_count_ge65_suppress_flag	Char	1	Reason for Suppression of Bene_Count_Ge65	2013
16	total_claim_count_ge65	Num	8	Number of Claims, Including Refills for Beneficiaries Age 65+	2013
17	ge65_suppress_flag	Char	1	Reason for Suppression of Total_Claim_Count_Ge65, Total_Drug_Cost_Ge65 and Total_Day_Supply_Ge65	2013
18	total_day_supply_ge65	Num	8	Number of Day's Supply for All Claims for Beneficaries Age 65+	2013
19	total_drug_cost_ge65	Num	8	Aggregate Cost Paid for All Claims for Beneficiaries Age 65+	2013

Table 2. NPI Summary File Layout

#	Variable	Туре	Len	Label	Data Year Begin Date
1	npi	Char	10	National Provider Identifier	2013
2	nppes_provider_last_org_name	Char	70	Last Name/Organization Name of the Provider	2013
3	nppes_provider_first_name	Char	20	First Name of the Provider	2013
4	nppes_provider_mi	Char	1	Middle Initial of the Provider	2013
5	nppes_credentials	Char	20	Credentials of the Provider	2013
6	nppes_provider_gender	Char	1	Gender of the Provider	2013
7	nppes_entity_code	Char	1	Entity Type of the Provider	2013
8	nppes_provider_street1	Char	55	Street Address 1 of the Provider	2013
9	nppes_provider_street2	Char	55	Street Address 2 of the Provider	2013
10	nppes_provider_city	Char	40	City of the Provider	2013
11	nppes_provider_zip5	Char	5	Zip Code of the Provider (first five digits)	2014
12	nppes_provider_zip4	Char	4	Zip Code of the Provider (last four digits)	2014
13	nppes_provider_state	Char	2	State Code of the Provider	2013
14	nppes_provider_country	Char	2	Country Code of the Provider	2013
15	specialty_description	Char	75	Provider Specialty Type	2013
16	description_flag	Char	1	Source of Provider Specialty	2013
17	medicare_prvdr_enroll_status	Char	1	Enrollment Status of the Provider in the Medicare Program	2014
18	bene_count	Num	8	Number of Medicare Beneficiaries	2013
19	total_claim_count	Num	8	Number of Medicare Part D claims, Including Refills	2013
20	total_drug_cost	Num	8	Aggregate Cost Paid for All Claims	2013
21	total_day_supply	Num	8	Number of Day's Supply for All Claims	2013
22	bene_count_ge65	Num	8	Number of Medicare Beneficiaries Age 65+	2013
23	bene_count_ge65_suppress_flag	Char	1	Reason for Suppression of Bene_Count_Ge65	2013
24	total_claim_count_ge65	Num	8	Number of Claims, Including Refills, for Beneficiaries Age 65+	2013
25	ge65_suppress_flag	Char	1	Reason for Suppression of Total_Claim_Count_Ge65, Total_Drug_Cost_Ge65 and Total_Day_Supply_Ge65	2013
26	total_drug_cost_ge65	Num	8	Aggregate Cost Paid for All Claims for Beneficiaries Age 65+	2013
27	total_day_supply_ge65	Num	8	Number of Day's Supply for All Claims for Beneficaries Age 65+	2013
28	brand_claim_count	Num	8	Total Claims of Brand Drugs, Including Refills	2013
29	brand_suppress_flag	Char	1	Reason for Suppression of Brand_Claim_Count and Brand_Drug_Cost	2013
30	brand_drug_cost	Num	8	Aggregate Cost Paid for Brand-Name Drugs	2013
31	generic_claim_count	Num	8	Total Claims of Generic Drugs, Including Refills	2013
32	generic_suppress_flag	Char	1	Reason for Suppression of Generic_Claim_Count and Generic_Drug_Cost	2013
33	generic_drug_cost	Num	8	Aggregate Cost Paid for Generic Drugs	2013
34	other_claim_count	Num	8	Total Claims of Other Drugs, Including Refills	2013
35	other_suppress_flag	Char	1	Reason for Suppression of Other_Claim_Count and Other_Drug_Cost	2013
36	other_drug_cost	Num	8	Aggregate Cost Paid for Other Drugs	2013
37	mapd_claim_count	Num	8	Number of Claims for Beneficiaries Covered by MAPD Plans	2013

Table 2. NPI Summary File Layout (Cont.)

#	Variable	Туре	Len	Label	Data Year Begin Date
38	mapd_suppress_flag	Char	1	Reason for Suppression of MAPD_Claim_Count and MAPD_Drug_Cost	2013
39	mapd_drug_cost	Num	8	Aggregate Cost Paid for Claims Filled by Beneficiaries in MAPD Plans	2013
40	pdp_claim_count	Num	8	Number of Claims for Beneficiaries Covered by Standalone PDP Plans	2013
41	pdp_suppress_flag	Char	1	Reason for Suppression of PDP_Claim_Count and PDP_Drug_Cost	2013
42	pdp_drug_cost	Num	8	Aggregate Cost Paid for Claims Filled by Beneficiaries in Standalone PDP	2013
43	lis_claim_count	Num	8	Number of Claims for Beneficiaries Covered by Low-Income Subsidy	2013
44	lis_suppress_flag	Char	1	Reason for Suppression of Lis_Claim_Count and Lis_Drug_Cost	2013
45	lis_drug_cost	Num	8	Aggregate Cost Paid for Claims Covered by Low-Income Subsidy	2013
46	nonlis_claim_count	Num	8	Number of Claims for Beneficiaries Not Covered by Low-Income Subsidy	2013
47	nonlis_suppress_flag	Char	1	Reason for Suppression of Nonlis_Claim_Count and Nonlis_Drug_Cost	2013
48	nonlis_drug_cost	Num	8	Aggregate Cost Paid for Claims Not Covered by Low-Income Subsidy	2013
49	opioid_bene_count	Num	8	Number of Medicare Beneficiaries Filling Opioid Claims	2014
50	opioid_claim_count	Num	8	Total Claims of Opioid Drugs, Including Refills	2014
51	opioid_drug_cost	Num	8	Aggregate Cost Paid for Opioid Drugs	2014
52	opioid_day_supply	Num	8	Number of Day's Supply of All Opioid Drugs	2014
53	antibiotic_bene_count	Num	8	Number of Medicare Beneficiaries Filling Antibiotic Claims	2014
54	antibiotic_claim_count	Num	8	Total Claims of Antibiotic Drugs, Including Refills	2014
55	antibiotic_drug_cost	Num	8	Aggregate Cost Paid for Antibiotic Drugs	2014
56	hrm_bene_count_ge65	Num	8	Number of Medicare Beneficiaries Age 65+ Filling HRM Claims	2014
57	hrm_bene_ge65_suppress_flag	Char	1	Reason for Suppression of HRM_Bene_Count_Ge65	2014
58	hrm_claim_count_ge65	Num	8	Total Claims of HRM Drugs, Including Refills, for Beneficiaries Age 65+	2014
59	hrm_ge65_suppress_flag	Char	1	Reason for Suppression of HRM_Claim_Count_Ge65 and HRM_Drug_Cost_Ge65	2014
60	hrm_drug_cost_ge65	Num	8	Aggregate Cost Paid for HRM Drugs for Beneficiaries Age 65+	2014
61	anti_psych_bene_count	Num	8	Number of Medicare Beneficiaries Filling Antipsychotic Claims	2014
62	anti_psych_claim_count	Num	8	Total Claims of Antipsychotic Drugs, Including Refills	2014
63	anti_psych_drug_cost	Num	8	Aggregate Cost Paid for Antipsychotic Drugs	2014