GEOGRAPHIC DIRECT CONTRACTING MODEL DATA BOOK GUIDE

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Overview

This informational Data Book for Geographic Direct Contracting Model (Geo) applicants contains the following Medicare fee-for-service (FFS) data:

- County-level enrollment, utilization, and several alternative payment models (APMs) data for FFS, non-MA beneficiaries;
- Only counties in the core-based statistical areas (CBSAs) that have been selected as regions the Geo Request for Applications are included in the Data Book with geographic identifiers for county, state, and CBSA;
- Calendar years 2017 – 2019, where available.

Geo applicants may use this Data Book to inform calculations to complete the Geographic Direct Contracting Proposed Discount Tool (PDT).

Contents

There are five worksheets in the data book Excel workbook:

(1) "List of Variables and Attributes": Lists the data source, variable name associated with each column, type, description, and extraction process for each variable in each of the data tables.

(2) "Extraction Details – Categories": Defines each of the service categories for the utilization data and includes the code specifications used to extract the data by service category from claims.

(3) "Enrollment Data": Provides data on FFS enrollment, including the number of FFS beneficiaries enrolled, FFS member months, dual eligible beneficiaries, End-Stage Renal Disease (ESRD) beneficiaries, disabled beneficiaries, beneficiaries over age 65, beneficiaries enrolled in Medigap, Medigap member months, beneficiaries enrolled in other supplemental insurance, supplemental insurance member months, and average risk scores. The data is in wide format, so each variable is repeated for each year (2017-2019) across row 1.

(4) "Utilization Data": Provides data on FFS beneficiary service utilization, broken down by service category, number of claims, number of utilizing beneficiaries, number of providers, paid amount, and allowed charge amount. The data is in wide format, so each combination of service category and year (2017-2019) for each measure can be found as a separate variable in row 1. The service categories included are:

- Home health agency
- DME/prosthetics/diabetes
- Hospice
- Inpatient facility
- Outpatient facility – Emergency
- Outpatient facility – Medical/Surgery
- Professional (including Part B other, lab tests, imaging)
- Part B drugs
- Skilled nursing facility

- Ambulance (including both hospital-based and independent ambulance)

Note that the breakdown of service categories in this Data Book may vary slightly from the list of categories in the Geo Proposed Discount Tool.

(5) "APM Data": Provides data on FFS beneficiaries enrolled in Alternative Payment Models (APMs) for number of beneficiaries enrolled, total paid amount (for non-claims-based payments), and average paid amount (for non-claims-based payments). This data is in wide format, so each combination of APM and year (2017-2019) for each measure can be found as a separate variable in row 1. The APMs included are:

- Next Generation Accountable Care Organization (NGACO)
- Shared Savings Program (SSP)
- Comprehensive Primary Care Plus (CPC+)
- Oncology Care Model (OCM)
- Bundled Payments for Care Improvement (BPCI) Advanced
- Comprehensive Care for Joint Replacement (CJR)

Data Sources

Data sources for each variable are listed in the Excel workbook in the "List of Variables and Attributes" tab. Sources include:

County to CBSA Crosswalk: The CBSA Delineation file dated "Aug. 2017" from the US Census Bureau publicly available delineation files[1] was used to link counties to CBSAs.

IDR: The Integrated Data Repository (IDR) is a CMS data warehouse integrating Parts A, B, C, D, and Durable Medical Equipment claims, beneficiary and provider data sources, and ancillary data such as contract information and risk scores.

COBA: A Coordination of Benefits Agreement (COBA) file was generated by CMS GDIT. The COBA file is a beneficiary-level file containing beneficiaries enrolled in supplemental insurance plans.

MDM and Contractors: Master Data Management (MDM) is a service that links beneficiary, provider, and organizational data from various databases throughout CMS. Source data for beneficiary and payment information was also acquired through the Innovation Center Model Implementation Contractors. Beneficiary alignment data from the MDM was used in conjunction with the other data sources listed below for each APM:

- Next Generation Accountable Care Organization (NGACO) – Beneficiary alignment data was accessed through the MDM, while the county level shared savings data was provided internally from the Innovation Center NGACO Model team.
- Shared Savings Program (SSP) – Beneficiary alignment data was accessed through the MDM system. Beneficiary alignment data was linked with ACO level data to allow for county level

[1] Available at: https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/delineation-files.html

summary of payment information. The earned shared savings payments and losses by ACO were extracted from the Shared Savings Program ACO Public Use Files[2].

- Comprehensive Primary Care Plus (CPC+) – Beneficiary alignment and payment data were accessed through the MDM system.
- Oncology Care Model (OCM) - Data on beneficiary alignment and shared savings payments were provided by Innovation Center OCM Model Team.
- Bundled Payments for Care Improvement (BPCI) Advanced – Payment data was provided by the CMS implementation contractor. Note: payment data was only available for the time span 10/1/18 (the go-live date of the model) to 12/31/19. Because some of the payment data was for a timeframe spanning 2018 and 2019, when necessary, for the purposes of this Data Book the payments have been split proportionally between 2018 and 2019 (based on episode length and how many months were in each year).
- Comprehensive Care for Joint Replacement (CJR) – Data on beneficiary alignment and model payments were provided by the Innovation Center CJR Model Team.

Methods

For all datasets, eligible FFS beneficiaries were defined as those enrolled in both Medicare Part A and Part B, but not Part C for any part of the year. Beginning and end dates of enrollment periods, along with beneficiary status during those periods, were used to identify beneficiaries eligible during the desired timeframe (2017-2019).[3][4]

Enrollment Data

The number of total unique FFS beneficiaries, and unique FFS beneficiaries in each category (ESRD, dually eligible, Disabled, over 65) was calculated by summing the distinct beneficiaries in each category. Any beneficiary that meets the eligibility criteria (enrolled in both Medicare Part A and Part B, but not Part C) for at least one month of the year is counted in that year.

The number of eligible FFS beneficiary member months for each year was calculated using the Medicare beneficiary fact table in the IDR and is the sum of all months in each year for which any beneficiary is enrolled in Medicare Part A and Part B, but not Part C.

The number of FFS beneficiaries (and beneficiary member months) that were enrolled in Medigap and other supplemental insurance were calculated in a similar manner, after joining the Medigap and supplemental insurance data from the COBA file to the enrollment table. COBA ID ranges were used to determine type of supplemental insurance (e.g., Medigap, employer, TriCare, CHAMPVA, or other).

Average HCC risk scores were calculated for each county for eligible FFS beneficiaries included in enrollment counts.

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[2] Available at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO

[3] Data cells with less than 11 beneficiaries in the FFS files have been redacted for privacy (redacted cells are marked with an *).

[4] Due to the Maryland Total Cost of Care model, Cecil County in Maryland has been excluded from the Philadelphia CBSA for the Geo model and therefore is excluded from the Data Book.

Examples of how and when eligible FFS beneficiaries were counted include:

Example	How is beneficiary counted?
Beneficiary is enrolled in Part A, but not Part B or Part C for all of 2018.	Beneficiary is not counted for the 2018 enrollment count because they are not enrolled in both Part A and Part B.
Beneficiary is enrolled in Part A, Part B, and Part C for all of 2018.	Beneficiary is not counted for the 2018 enrollment count because they are enrolled in Part C (Medicare Advantage).
Beneficiary is enrolled in Part A, Part B, and Part C January - February of 2018, and drops Part C mid-month in March of 2018.	Beneficiary is counted for the 2018 enrollment count, and beneficiary's member months are counted for all months (including March 2018) in which they were enrolled in Part A and Part B, but not Part C. Months prior to March in which the beneficiary is enrolled in Part C are not included as member months.
Beneficiary is enrolled in Part A and Part B, but not Part C January - Sept of 2018, and drops Part B mid-month in October of 2018.	Beneficiary is counted for the 2018 enrollment count, and beneficiary's member months are counted for all months (including October 2018) in which they were enrolled in Part A and Part B, but not Part C. Months following October in which the beneficiary is not enrolled in Part B are not included as member months.
Beneficiary enrolled in Part A and Part B, but not Part C dies mid-month in April of 2018.	Beneficiary is counted for the 2018 enrollment count, and beneficiary's member months are counted for all months (including April 2018) in which they were alive and enrolled in Part A and Part B, but not Part C.
Beneficiary is enrolled in Part A and Part B, but not Part C for all of 2018, but moves from one county to another in June of 2018.	Beneficiary is counted for the 2018 enrollment count in both counties. Beneficiary's member months are allocated to the two counties based on how many months were spent in each county.
Beneficiary is enrolled in Part A and Part B, but not Part C for all of 2018, and is dually eligible for Medicaid January - August of 2018, but not September - December of 2018.	Beneficiary is counted for the 2018 enrollment count, and beneficiary's member months are counted for the whole year. Beneficiary is counted as dually eligible for 2018, and dually-eligible member months are counted for January through August of 2018.

Utilization Data

Utilization data was extracted for eligible FFS beneficiaries from the IDR according to the code specifications shown on the tab entitled “Extract Details – Categories” in the Data Book. Payment amounts were calculated using final action claims. Claim “through dates” were used to identify when a payment occurred.

The following have been excluded from the utilization data reported:

- GME – Graduate Medical Education Payments
- DSP – Disproportionate Share Payments
- UCP – Uncompensated Care Pool Payments
- Pass through amounts

APM Data

Beneficiary alignment data accessed through the MDM beneficiary and payment data from the Innovation Center Model Implementation Contractors were joined to calculate enrollment and payment data (for non-claims-based payments) for eligible FFS beneficiaries.

For datasets that provided payment data for a timespan that ranges over two years, the payments were split between the years proportionally based on the number of months in each year in the timespan. Beneficiary model alignment data was linked to the BENE_SK identifier to the IDR to identify the address of each beneficiary. The beneficiary and related model payment information was then rolled up into the county level for each CBSA.