

# 2016 | DATA USER'S GUIDE: SURVEY FILE



Centers for Medicare & Medicaid Services (CMS)  
Office of Enterprise Data and Analytics (OEDA)

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# TABLE OF CONTENTS

|  |             |
|--|-------------|
| <b>ACRONYM LIST</b> .....                            | <b>viii</b> |
| <b>INTRODUCTION</b> .....                            | <b>1</b>    |
| Contents of the Data User's Guide: Survey File ..... | 1           |
| What's New in 2016? .....                            | 1           |
| Community Questionnaire Changes .....                | 2           |
| Data Processing.....                                 | 3           |
| Guidelines for Data Use.....                         | 7           |
| <b>1. FILE STRUCTURE</b> .....                       | <b>8</b>    |
| 1.1 LDS Specifications.....                          | 8           |
| 1.2 File Structure .....                             | 8           |
| 1.3 Claims Files .....                               | 12          |
| 1.3.1 Utilization Detail Records .....               | 12          |
| <b>2. DATA FILE DOCUMENTATION</b> .....              | <b>13</b>   |
| 2.1 LDS Contents.....                                | 13          |
| 2.2 LDS Components .....                             | 13          |
| 2.2.1 Codebooks .....                                | 13          |
| 2.2.2 Questionnaires.....                            | 14          |
| 2.2.3 Data User Resources.....                       | 14          |
| 2.3 Data Edits and Imputation.....                   | 14          |
| 2.3.1 Data Edits .....                               | 14          |
| 2.3.2 Imputation .....                               | 15          |
| <b>3. DATA FILE NOTES</b> .....                      | <b>16</b>   |
| 3.1 Global Information .....                         | 16          |
| BASEID.....  | 16          |
| Missing Values .....                                 | 16          |
| Derived and Administrative Variables .....           | 16          |
| Initial Interview Variables.....                     | 16          |
| Data Editing .....                                   | 16          |
| Open-Ended Questions .....                           | 17          |
| Consistency with Medicare Program Statistics .....   | 17          |

|   |    |
|---|----|
| 3.2 Survey File Segment Information .....           | 17 |
| Access to Care (ACCESSCR).....                      | 18 |
| Core Content .....                                  | 18 |
| Variable Definitions.....                           | 18 |
| Special Notes .....                                 | 19 |
| Administrative Utilization Summary (ADMNUTLS) ..... | 20 |
| Core Content .....                                  | 20 |
| Variable Definitions.....                           | 20 |
| Special Notes .....                                 | 20 |
| Assistance (ASSIST).....                            | 25 |
| Core Content .....                                  | 25 |
| Variable Definitions.....                           | 25 |
| Special Notes .....                                 | 26 |
| Chronic Conditions (CHRNCOND) .....                 | 26 |
| Core Content .....                                  | 26 |
| Variable Definitions.....                           | 26 |
| Special Notes .....                                 | 27 |
| Demographics (DEMO).....                            | 27 |
| Core Content .....                                  | 27 |
| Variable Definitions.....                           | 27 |
| Special Notes .....                                 | 30 |
| Dental Care Access (DENTAL).....                    | 30 |
| Core Content .....                                  | 30 |
| Variable Definitions.....                           | 30 |
| Special Notes .....                                 | 30 |
| Diabetes (DIABETES) .....                           | 30 |
| Core Content .....                                  | 30 |
| Variable Definitions.....                           | 30 |
| Special Notes .....                                 | 31 |
| Facility Assessments (FACASMNT).....                | 31 |
| Core Content .....                                  | 31 |
| Variable Definitions.....                           | 31 |
| Special Notes .....                                 | 32 |
| Facility Characteristics (FACCHAR) .....            | 33 |
| Core Content .....                                  | 33 |
| Variable Definitions.....                           | 33 |
| Special Notes .....                                 | 33 |

|   |    |
|---|----|
| Falls (FALLS) .....                                 | 34 |
| Core Content .....                                  | 34 |
| Variable Definitions.....                           | 34 |
| Special Notes .....                                 | 34 |
| Food Insecurity (FOODINS) .....                     | 35 |
| Core Content .....                                  | 35 |
| Variable Definitions.....                           | 35 |
| Special Notes .....                                 | 35 |
| General Health (GENHLTH) .....                      | 35 |
| Core Content .....                                  | 35 |
| Variable Definitions.....                           | 35 |
| Special Notes .....                                 | 36 |
| Health Insurance Summary (HISUMRY).....             | 36 |
| Core Content .....                                  | 36 |
| Variable Definitions.....                           | 36 |
| Special Notes .....                                 | 40 |
| Health Insurance Timeline (HITLINE) .....           | 41 |
| Core Content .....                                  | 41 |
| Variable Definitions.....                           | 41 |
| Special Notes .....                                 | 41 |
| Household Characteristics (HHCHAR) .....            | 42 |
| Core Content .....                                  | 42 |
| Variable Definitions.....                           | 42 |
| Special Notes .....                                 | 42 |
| Income and Assets (INCASSET).....                   | 42 |
| Core Content .....                                  | 42 |
| Variable Definitions.....                           | 42 |
| Special Notes .....                                 | 42 |
| Interview Characteristics (INTERV) .....            | 43 |
| Core Content .....                                  | 43 |
| Variable Definitions.....                           | 43 |
| Special Notes .....                                 | 44 |
| Medicare Advantage Questions (MAPLANQX).....        | 44 |
| Core Content .....                                  | 44 |
| Variable Definitions.....                           | 44 |
| Special Notes .....                                 | 44 |
| Medicare Plan Beneficiary Knowledge (MCREPLNQ)..... | 44 |
| Core Content .....                                  | 44 |
| Variable Definitions.....                           | 44 |

|  |    |
|--|----|
| Special Notes .....                              | 45 |
| Mental Health (MENTHLTH) .....                   | 45 |
| Core Content .....                               | 45 |
| Variable Definitions.....                        | 45 |
| Special Notes .....                              | 45 |
| Mobility (MOBILITY) .....                        | 45 |
| Core Content .....                               | 45 |
| Variable Definitions.....                        | 45 |
| Special Notes .....                              | 45 |
| Minimum Data Set (MDS3) .....                    | 46 |
| Core Content .....                               | 46 |
| Variable Definitions.....                        | 46 |
| Special Notes .....                              | 46 |
| NAGI Disability (NAGIDIS) .....                  | 46 |
| Core Content .....                               | 46 |
| Variable Definitions.....                        | 46 |
| Special Notes .....                              | 48 |
| Nicotine and Alcohol (NICOALCO) .....            | 48 |
| Core Content .....                               | 48 |
| Variable Definitions.....                        | 48 |
| Special Notes .....                              | 48 |
| Outcome and Assessment Information (OASIS) ..... | 48 |
| Core Content .....                               | 48 |
| Variable Definitions.....                        | 48 |
| Special Notes .....                              | 48 |
| Part D Drug Plan Experience (RXPARTD) .....      | 49 |
| Core Content .....                               | 49 |
| Variable Definitions.....                        | 49 |
| Special Notes .....                              | 49 |
| Patient Activation (PNTACT) .....                | 50 |
| Core Content .....                               | 50 |
| Variable Definitions.....                        | 50 |
| Special Notes .....                              | 50 |
| Prescription Medication Usage (PMUSE) .....      | 50 |
| Core Content .....                               | 50 |
| Variable Definitions.....                        | 50 |
| Special Notes .....                              | 50 |

|   |           |
|---|-----------|
| Preventive Care (PREVCARE) .....                          | 51        |
| Core Content .....  | 51        |
| Variable Definitions.....                                 | 51        |
| Special Notes .....                                       | 51        |
| Residence Timeline (RESTMLN) .....                        | 51        |
| Core Content .....  | 51        |
| Variable Definitions.....                                 | 51        |
| Special Notes .....                                       | 51        |
| Satisfaction with Care (SATWCARE) .....                   | 52        |
| Core Content .....  | 52        |
| Variable Definitions.....                                 | 52        |
| Special Notes .....                                       | 52        |
| Usual Source of Care (USCARE) .....                       | 52        |
| Core Content .....  | 52        |
| Variable Definitions.....                                 | 52        |
| Special Notes .....                                       | 53        |
| Vision and Hearing (VISHEAR) .....                        | 53        |
| Core Content .....  | 53        |
| Variable Definitions.....                                 | 53        |
| Special Notes .....                                       | 53        |
| Weights .....   | 53        |
| Cross Sectional Weights.....                              | 53        |
| Longitudinal Weights .....                                | 53        |
| Using weights with data from Topical Questionnaires ..... | 54        |
| <b>4. REFERENCES.....</b>                                 | <b>55</b> |
| <b>5. APPENDICES.....</b>                                 | <b>57</b> |
| Appendix A: MCBS Common Definitions.....                  | 57        |
| Appendix B: MCBS Rounds by Data Year and Season .....     | 61        |
| Appendix C: Technical Appendix .....                      | 62        |

## LIST OF EXHIBITS

|  |    |
|--|----|
| <b>Exhibit I.1:</b> 2016 MCBS Community Content Additions .....        | 3  |
| <b>Exhibit 1.2:</b> 2016 MCBS Survey File Segments and Contents.....   | 9  |
| <b>Exhibit 2.3.1:</b> Data Review and Editing Codes .....              | 15 |
| <b>Exhibit 3.2.1:</b> Differences between FACASMNT and MDS3 Data.....  | 33 |
| <b>Exhibit 3.2.2:</b> Facility Characteristics' Renamed Variables..... | 34 |

## ACRONYM LIST

|          |  |
|----------|--|
| ACCESSCR | Access to Care segment                                 |
| ACO      | Accountable Care Organization                          |
| ACQ      | Access to Care Questionnaire                           |
| ACS      | American Community Survey                              |
| ADI      | Area Deprivation Index                                 |
| ADLs     | Activities of daily living                             |
| ADMNUTLS | Administrative Utilization Summary segment             |
| AGREESCL | Agreement Scale segment                                |
| ASSIST   | Assistance segment                                     |
| ATC      | Access to Care   |
| AVQ      | Address Verification Questionnaire                     |
| BQ       | Background Questionnaire                               |
| BRR      | Balanced repeated replication (or Fay's method)        |
| CAPI     | Computer-Assisted Personal Interviewing                |
| CAU      | Cost and Use   |
| CENWGTS  | Continuously enrolled weights for Survey File          |
| CHRNCOND | Chronic Conditions segment                             |
| CMS      | Centers for Medicare & Medicaid Services               |
| COPD     | Chronic obstructive pulmonary disease                  |
| CSEVRWGT | Cost Supplement File Weights segment (cross-sectional) |
| CSL2WGTS | Cost Supplement File Longitudinal weights (2-year)     |
| CPS      | Charge Payment Summary                                 |
| DEMO     | Demographics segment                                   |
| DIQ      | Demographics and Income Questionnaire                  |
| DME      | Durable medical equipment                              |
| DO       | Doctors of Osteopathy                                  |
| DUA      | Data Use Agreement                                     |
| DUQ      | Dental Utilization Questionnaire                       |
| E&M      | Evaluation and Management                              |
| ED       | Emergency department                                   |
| ENS      | Enumeration Summary Questionnaire                      |
| EOBs     | Explanation of Benefit statements                      |
| ERQ      | Emergency Room Utilization Questionnaire               |
| ERS      | Economic Research Service                              |
| ESRD     | End-stage renal disease                                |
| EVRWGTS  | Ever enrolled population weights                       |
| EX       | Expenditures Questionnaire                             |
| FACASMNT | Facility Assessments segment                           |
| FACCHAR  | Facility Characteristics segment                       |
| FAE      | Facility Events segment                                |
| FALLS    | Falls segment  |
| FFS      | Fee-for-Service  |
| FOODINS  | Food Insecurity segment                                |
| FPL      | Federal poverty level                                  |
| FQ       | Facility Questionnaire                                 |
| GAD      | Generalized Anxiety Disorder screening tool (GAD-2)    |
| GENHLTH  | General Health segment                                 |
| HAQ      | Housing Characteristics Questionnaire                  |

|          |   |
|----------|---|
| HFQ      | Health Status and Functioning Questionnaire               |
| HH       | Home health   |
| HHC      | Health and Health Care of the Medicare Population         |
| HHCHAR   | Household Characteristics segment                         |
| HHQ      | Home Health Utilization Questionnaire                     |
| HHS      | Home Health Summary Questionnaire                         |
| HIPAA    | Health Insurance Portability and Accountability Act       |
| HIQ      | Health Insurance Questionnaire                            |
| HIS      | Health Insurance Summary Questionnaire                    |
| HISUMRY  | Health Insurance Summary segment                          |
| HITLINE  | Health Insurance Timeline segment                         |
| HMO      | Health Maintenance Organization                           |
| HOP      | Hospital outpatient                                       |
| HS       | Health status   |
| IADLs    | Instrumental activities of daily living                   |
| IAQ      | Income and Assets Questionnaire                           |
| ID       | Identification  |
| IN       | Introduction Questionnaire                                |
| INCASSET | Income and Assets segment                                 |
| INQ      | Introduction Questionnaire                                |
| INTERV   | Interview Characteristics segment                         |
| IP       | Inpatient   |
| IPO      | Inpatient Hospital Utilization Questionnaire              |
| IRB      | Institutional Review Board                                |
| IRQ      | Interviewer Remarks Questionnaire                         |
| KNQ      | Beneficiary Knowledge and Information Needs Questionnaire |
| LDS      | Limited Data Set(s)                                       |
| LEP      | Limited English Proficiency                               |
| LNG2WGTS | Survey File longitudinal weights (2-year)                 |
| LNG3WGTS | Survey File longitudinal weights (3-year)                 |
| LNG4WGTS | Survey File longitudinal weights (4-year)                 |
| MA       | Medicare Advantage  |
| MAPLANQX | Medicare Advantage Plan Questionnaire segment             |
| MB       | Medicare beneficiary                                      |
| MBQ      | Mobility of Beneficiaries Questionnaire                   |
| MBSF     | Master Beneficiary Summary File                           |
| MCBS     | Medicare Current Beneficiary Survey                       |
| MCO      | Managed Care Organization                                 |
| MCREPLNQ | Medicare Plan Beneficiary Knowledge segment               |
| MD       | Medical Doctor  |
| MDS3     | Minimum Data Set  |
| MMA      | Medicare Modernization Act                                |
| MTF      | Military Treatment Facility                               |
| NAGIDIS  | NAGI Disability segment                                   |
| NHATS    | National Health and Aging Trends Study                    |
| NICOALCO | Nicotine and Alcohol segment                              |
| NORC     | NORC at the University of Chicago                         |
| OASIS    | Outcome and Assessment Information segment                |
| OEDA     | Office of Enterprise Data and Analytics                   |
| OIP      | Other inpatient   |
| OM       | Other medical expenses                                    |

|          |   |
|----------|---|
| OMB      | Office of Management and Budget   |
| OMQ      | Other Medical Expenses Utilization Questionnaire                          |
| OPQ      | Outpatient Utilization Questionnaire                                      |
| PAQ      | Patient Activation Questionnaire  |
| PDE      | Prescription Drug Event   |
| PHQ      | Patient Health Questionnaire depression screening tool (PHQ-9)            |
| PII      | Personally Identifiable Information                                       |
| PM       | Prescription Medicine   |
| PME      | Prescribed Medicine Events segment  |
| PMQ      | Prescribed Medicine Questionnaire   |
| PMS      | Prescribed Medicine Summary   |
| PMUSE    | Prescription Medicine Usage segment                                       |
| POS      | Provider of Service   |
| PPIC     | Patient Perceptions of Integrated Care Questionnaire                      |
| PPO      | Preferred Provider Organization   |
| PREVCARE | Preventive Care segment   |
| PSQ      | Post-Statement Charge Questionnaire                                       |
| PSU      | Primary Sampling Units  |
| PNTACT   | Patient Activation segment  |
| PUF      | Public Use File   |
| PVQ      | Preventive Care Questionnaire   |
| RESTMLN  | Residence Timeline segment  |
| RH       | Residence History   |
| RIC      | Record Identification Code  |
| RXPARTD  | Part D Drug Plan Experience segment                                       |
| RXQ      | Drug Coverage Questionnaire   |
| SAS      | Statistical Analysis System   |
| SATWCARE | Satisfaction with Care segment  |
| SCF      | Sample Control File   |
| SCQ      | Satisfaction with Care Questionnaire                                      |
| SNF      | Skilled nursing facility  |
| SSA      | Social Security Administration  |
| SSN      | Social Security Number  |
| SSP      | Shared Savings Program  |
| SSU      | Secondary Sampling Units  |
| STQ      | Statement Section Questionnaire   |
| US       | Use of Health Services Questionnaire                                      |
| USCARE   | Usual Source of Care segment  |
| USDA ERS | U.S. Department of Agriculture Economic Research Service                  |
| USQ/PPIC | Usual Source of Care/Patient Perceptions of Integrated Care Questionnaire |
| USU      | Ultimate Sampling Unit  |
| VISHEAR  | Vision and Hearing segment  |
| VRDC     | Virtual Research Data Center  |

## INTRODUCTION

The content of the Medicare Current Beneficiary Study (MCBS) Survey File is governed by its central focus of serving as a unique source of information on beneficiaries' health and well-being that cannot be obtained through CMS administrative sources alone. The Survey File includes data related to Medicare beneficiaries' access to care, health status, and other information regarding beneficiaries' knowledge, attitudes towards, and satisfaction with their health care. This data release also contains demographic data and information on all types of health insurance coverage as well as Fee-for-Service (FFS) claims data, which provide information on medical services and payments paid by the beneficiary or insurer under this plan type. The Survey File is generally released 18 months after the close of the calendar year for data collection. Note that for analyses on beneficiaries' health care costs and utilization, data users will need to use the Cost Supplement File in conjunction with the Survey File.

### Contents of the Data User's Guide: Survey File

This manual contains detailed information about the Survey File and specific background information to help data users understand and analyze the data. Readers should first familiarize themselves with the content of the 2016 Data User's Guide: General Information document to obtain an overview of the survey, questionnaires, sample design, and other topics relevant to the MCBS in general. Data users can access this Guide along with other data documentation at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Codebooks.html>. Please also see Appendix A: MCBS Common Definitions for descriptions of frequently used or key terms.

Here is an overview of the contents of the Data User's Guide: Survey File document:

1. What's New? – This section describes the key MCBS Questionnaire changes and other highlights for the data year.
2. Section 1: File Structure – This section includes a technical description of the specifications and structure of the file and a brief description of the record types in this file.
3. Section 2: Data File Documentation – This section provides information on the content of the data file including instructions for reading in the data.
4. Section 3: Data File Notes – This section provides an overview of each file included in the release, a description of derived variables, and any changes from previous releases or special highlights for data users.

### What's New in 2016?

CMS releases three sets of files for the 2016 data – the Public Use File (PUF) and two Limited Data Sets (LDS). The LDS releases are referred to as the Survey File (formerly Access to Care (ATC)) and the Cost Supplement File (formerly Cost and Use (CAU)). The Survey File serves as a stand-alone research file. However, users of the Cost Supplement File require the Survey File for information on beneficiaries' demographic characteristics and health insurance information, as these fields are not included in the Cost Supplement File.

The data within the LDS releases are organized into data segments (formerly RICs). In this Guide, [Section 1.2: File Structure](#) provides a crosswalk from historical segments to 2016 segments.

Below, data users will note highlights and updates for the 2016 data year. In 2016, there were a number of Community Questionnaire changes resulting from modifications to field procedures and to questionnaire

structure (i.e., item- and section-level) updates. Please see the Data User's Guide: General Information for more information about these modifications.

### *Community Questionnaire Changes*

Several item and section level changes were made to the Community questionnaire in 2016.

#### **Demographics and Income (DIQ)**

In Fall 2016, a Limited English Proficiency (LEP) measure about reading was added to the questionnaire.

#### **Dental Utilization (DUQ)**

New questions were asked of beneficiaries to determine why they may not have access to dental health services. These questions are asked during each round of data collection and summarized in the DENTAL segment.

#### **Health Status and Functioning (HFQ)**

In Fall 2016, questions were revised to align the MCBS Community questionnaire specifications with the Department of Health and Human Services (DHHS) Data Council Recommended Guidance for Survey Questions and Preferred Practices in HHS Surveys for Selected Estimates. This effort resulted in the replacement of existing mental health questions with standardized scales in the Health Status and Functioning (HFQ) questionnaire section. Questions about preventive care were moved from the HFQ section to a new Preventive Care section (PVQ) to enhance the flow of the questionnaire. The HFQ also contains a number of questions on diabetes that are released in the Diabetes segment of the 2016 Survey File LDS.

#### **Income and Assets (IAQ)**

In Summer 2016, a five question set was added to the Income and Assets (IAQ) questionnaire. These items were adapted from the Health and Retirement Survey (HRS) to collect information about inheritances and other lump sum assets. Please note that this data was released with the 2015 Survey File LDS since the reference period is 2015.

In Summer 2017, (Round 78) income response categories for two questionnaire items on the IAQ (TOTAL\_COMBINED2, TOTAL\_SP1) were modified in an effort to standardize income response options across the MCBS Community questionnaires. The data from these items are released with the 2016 Survey File LDS since the reference period is 2016.

#### **Beneficiary Knowledge and Information Needs (KNQ)**

In Winter 2016, three items were added to the Beneficiary Knowledge and Information Needs (KNQ) section to identify some of the reasons beneficiaries find it difficult to compare plans and make plan choices. While asked in 2016, the KNQ has a 2015 reference period; these KNQ data are included in the 2015 Survey File in the Medicare Plan Beneficiary Knowledge segment (MCREPLNQ).

#### **Mobility (MBQ)**

The MBQ items are released in the Mobility segment of the 2016 Survey File LDS. These items ask about the beneficiary's travel activities, including driving and transportation availability.

## Nicotine and Alcohol Use (NAQ)

In Fall 2016, existing items about tobacco and alcohol use were replaced with items based on DHHS recommendations. Previously, tobacco and alcohol use questions had been asked as part of the Health Status and Functioning (HFQ) section. The new nicotine and alcohol use items were placed in a new section, Nicotine and Alcohol Use (NAQ), to enhance the flow of the questionnaire.

## Preventive Care (PVQ)

Existing items about the seasonal flu vaccine were moved from the Health Status and Functioning (HFQ) section and added to the new section — Preventive Care (PVQ) — beginning in Winter 2016. In Summer 2016, two items were added to the PVQ. One item, regarding the shingles vaccine, is a new item for MCBS, while the other item, about pneumonia vaccine, has previously been part of the HFQ section. In Fall 2016, screening questions about blood pressure, cholesterol, mammogram, Pap smear, digital rectum exam, prostate cancer that were previously asked in the HFQ section migrated to the PVQ to enhance the flow of the questionnaire.

## Usual Source of Care (USQ)

Changes were made in Fall 2016 to the Usual Source of Care (USQ) questionnaire section to remove the Patient Perceptions of Integrated Care (PPIC) items that were added in 2015. This change essentially reverted the USQ back to the version fielded in Fall 2014. The decision to remove the PPIC items in Fall 2016 was informed by feedback from interviewers about the challenges associated with administering these items to beneficiaries. The motivation for removing PPIC items in Fall 2016 was to allow NORC and CMS researchers time to reevaluate the wording, placement, and relevance of PPIC items before refielding a subset of the items in Winter 2018.

## Data Processing

**New content:** In 2016, the Dental Care Access, Diabetes, and Mental Health, and Mobility segments were added to the annual Survey File LDS. The 2016 questionnaire changes also resulted in the following variables added to the release:

**Exhibit I.1:** 2016 MCBS Community Content Additions

| Location | Questionnaire Section | Variable | Description                               |
|----------|-----------------------|----------|---|
| CHRNCOND | HFQ                   | D_OCDTYP | Type of Diabetes diagnosed                |
| CHRNCOND | HFQ                   | EMARTHOT | MCARE ELIG CAUSE – ARTHRITS, OTHER        |
| CHRNCOND | HFQ                   | EMARTOST | MCARE ELIG CAUSE – OSTEOARTHRITIS         |
| CHRNCOND | HFQ                   | EMHRTCND | MCARE ELIG CAUSE – VALVE/RHYTHM/OTHER HRT |
| CHRNCOND | HFQ                   | OCARTHOT | ARTHRITIS, OTHER (EVER)                   |
| CHRNCOND | HFQ                   | OCCBLOOD | BODY PART CANCER - BLOOD                  |
| CHRNCOND | HFQ                   | OCCBONE  | BODY PART CANCER - BONE                   |
| CHRNCOND | HFQ                   | OCCESOPH | BODY PART CANCER - ESOPHAGUS              |
| CHRNCOND | HFQ                   | OCCGALLB | BODY PART CANCER - GALL BLADDER           |
| CHRNCOND | HFQ                   | OCCLARNX | BODY PART CANCER - LARYNX                 |
| CHRNCOND | HFQ                   | OCCLEUK  | BODY PART CANCER - LEUKOCYTES             |

| Location | Questionnaire Section | Variable | Description  |
|----------|-----------------------|----------|--|
| CHRNCOND | HFQ                   | OCCLIVER | BODY PART CANCER - LIVER                                 |
| CHRNCOND | HFQ                   | OCCLYMPH | BODY PART CANCER - LYMPH NODES (LYMPHOMA)                |
| CHRNCOND | HFQ                   | OCCMOUTH | BODY PART CANCER - MOUTH                                 |
| CHRNCOND | HFQ                   | OCCPANCR | BODY PART CANCER - PANCREAS                              |
| CHRNCOND | HFQ                   | OCCRECT  | BODY PART CANCER - RECTUM                                |
| CHRNCOND | HFQ                   | OCCTESTS | BODY PART CANCER - TESTIS                                |
| CHRNCOND | HFQ                   | OCCTHYR  | BODY PART CANCER - THYROID                               |
| CHRNCOND | HFQ                   | OCCTISS  | BODY PART CANCER - SOFT TISSUE/FAT                       |
| CHRNCOND | HFQ                   | OCHRTCND | OTHER HEART COND, EG VALVE/RHYTHM (EVER)                 |
| CHRNCOND | HFQ                   | OCOSARTH | OSTEOARTHRITIS (EVER)                                    |
| CHRNCOND | HFQ                   | PROSSURG | PROSTATE SURGERY (EVER)                                  |
| DEMO     | None                  | CENSADI  | AREA DEPRIVATION INDEX (ADI) BASED ON CENSUS BLOCK GROUP |
| DENTAL   | DUQ                   | DDVDADVI | CDN'T GET DENTAL – OTHER DENT REC AGNST                  |
| DENTAL   | DUQ                   | DDVDAFRD | CDN'T GET DENTAL - AFRAID                                |
| DENTAL   | DUQ                   | DDVDBUSY | CDN'T GET DENTAL – TOO BUSY                              |
| DENTAL   | DUQ                   | DDVDCOST | CDN'T GET DENTAL - COST                                  |
| DENTAL   | DUQ                   | DDVDDIST | CDN'T GET DENTAL – OFFICE TOO FAR                        |
| DENTAL   | DUQ                   | DDVDFINE | CDN'T GET DENTAL – NOTHING WRONG                         |
| DENTAL   | DUQ                   | DDVDHOUR | CDN'T GET DENTAL – NOT OPEN GOOD TIMES                   |
| DENTAL   | DUQ                   | DDVDINS  | CDN'T GET DENTAL – INS DID NOT COVER                     |
| DENTAL   | DUQ                   | DDVDMONY | CDN'T GET DENTAL – DIDN'T WNT TO SPND \$                 |
| DENTAL   | DUQ                   | DDVDOTHR | CDN'T GET DENTAL - OTHER                                 |
| DENTAL   | DUQ                   | DDVDWORK | CDN'T GET DENTAL – CLDN'T TAKE OFF WORK                  |
| DENTAL   | DUQ                   | DDVNEED  | SP NEEDED DENTAL CARE BUT COULD NOT GET                  |
| DIABETES | HFQ                   | D_INSFRQ | HOW OFTEN TAKE INSULIN (FREQ)                            |
| DIABETES | HFQ                   | D_INSPMP | USE INSULIN PUMP   |
| DIABETES | HFQ                   | D_MEDFRQ | HOW OFTEN RX/ORAL DIABETES MED (FREQ)                    |
| DIABETES | HFQ                   | D_SORFRQ | HOW OFTEN CHECK FOOT SORES (FREQ)                        |
| DIABETES | HFQ                   | D_TSTFRQ | HOW OFTEN TEST BLOOD GLUCOSE (FREQ)                      |
| DIABETES | HFQ                   | DIAAGE   | SP'S AGE WHEN TOLD HAD DIABETES                          |
| DIABETES | HFQ                   | DIAASPRN | SP TAKES ASPIRIN REGULARLY FOR DIABETES                  |
| DIABETES | HFQ                   | DIACIRCF | DIABETES DIAG POOR CIRCULATION                           |
| DIABETES | HFQ                   | DIACTRLD | BLOOD SUGAR WELL CONTROLLED                              |
| DIABETES | HFQ                   | DIADRSAW | NUMBER OF TIMES SAW DR. LAST YR. FOR DIABETES            |

| Location | Questionnaire Section | Variable | Description                                |
|----------|-----------------------|----------|--|
| DIABETES | HFQ                   | DIAEYPRB | ANY PROBS W/ EYES DUE TO DIABETES?         |
| DIABETES | HFQ                   | DIAFEET  | ANY PROBS W/ FEET DUE TO DIABETES?         |
| DIABETES | HFQ                   | DIAFTEVR | EVER PROBS W/ FEET DUE TO DIABETES         |
| DIABETES | HFQ                   | DIAHEMOC | NUMBER TIMES CHECKED HEMOGLOBIN LAST YR    |
| DIABETES | HFQ                   | DIAHYPO  | EVER EXPERIENCE HYPOGLYCEMIA               |
| DIABETES | HFQ                   | DIAHYPTR | HOW TREAT SERIOUS HYPOGLYCEMIA             |
| DIABETES | HFQ                   | DIAINSUL | TAKES INSULIN                              |
| DIABETES | HFQ                   | DIAKDPEV | EVER ANY PROBLEMS WITH KIDNEYS             |
| DIABETES | HFQ                   | DIAKDPRB | ANY PROBS W/ KIDNEYS DUE TO DIABETES       |
| DIABETES | HFQ                   | DIAKIDNY | DIABETES DIAG KIDNEY DISEASE               |
| DIABETES | HFQ                   | DIAKNOW  | HOW MUCH KNOWS ABOUT MANAGING DIABETES     |
| DIABETES | HFQ                   | DIAMEDS  | SP TAKES PRESCRIBED DIABETES PILL/MEDICINE |
| DIABETES | HFQ                   | DIAMNGE  | HAD DIABETES SELF MANAGEMENT COURSE        |
| DIABETES | HFQ                   | DIANEURO | DIABETES DIAG WITH NEUROPATHY              |
| DIABETES | HFQ                   | DIAPRESS | MEASURES BLOOD PRESSURE AT HOME            |
| DIABETES | HFQ                   | DIAPRGNT | DID SP HAVE DIABETES DURING PREGNANCY      |
| DIABETES | HFQ                   | DIASKINC | DIABETES DIAG WITH CALLUSES                |
| DIABETES | HFQ                   | DIASORES | CHECKS FOR SORES ON FEET                   |
| DIABETES | HFQ                   | DIASUPPS | KNOW MEDICARE HELPS PAY FOR SUPPLIES       |
| DIABETES | HFQ                   | DIATENYR | FOOT EXAM IN LAST YEAR                     |
| DIABETES | HFQ                   | DIATEST  | TESTS OWN BLOOD FOR SUGAR/GLUCOSE          |
| DIABETES | HFQ                   | DIATRAN  | LAST TIME SP HAD DIABETES MGMNT TRAINING   |
| DIABETES | HFQ                   | DIAULCER | DIABETES DIAG WITH FOOT ULCER              |
| DIABETES | HFQ                   | INSUUNIT | HOW OFTEN TAKE INSULIN (UNIT)              |
| DIABETES | HFQ                   | MEDSUNIT | HOW OFTEN RX/ORAL DIABETES MED (UNIT)      |
| DIABETES | HFQ                   | SOREUNIT | HOW OFTEN CHECK FOOT SORES (UNIT)          |
| DIABETES | HFQ                   | TESTUNIT | HOW OFTEN TEST BLOOD GLUCOSE (UNIT)        |
| MAPLANQX | HIQ                   | YDISNROL | WHY STOPPED/CHANGED MCARE ADV PLAN         |
| MENTHLTH | HFQ                   | GADANXTY | GAD - NERVOUS, ANXIOUS, ON EDGE            |
| MENTHLTH | HFQ                   | GADWORRY | GAD - UNABLE TO CONTROL WORRY              |
| MENTHLTH | HFQ                   | PHQDEPRS | PHQ - DOWN, DEPRESSED, HOPELESS            |
| MENTHLTH | HFQ                   | PHQEATNG | PHQ - PROBLEMS WITH EATING                 |
| MENTHLTH | HFQ                   | PHQFAILR | PHQ - FEEL BAD ABOUT SELF                  |
| MENTHLTH | HFQ                   | PHQMOVE  | PHQ - PROBLEMS MOVING OR SPEAKING          |
| MENTHLTH | HFQ                   | PHQNOINT | PHQ - NO INTEREST DOING THINGS             |
| MENTHLTH | HFQ                   | PHQNOSLP | PHQ - PROBLEMS WITH SLEEP                  |

| <b>Location</b> | <b>Questionnaire Section</b> | <b>Variable</b> | <b>Description</b>                        |
|-----------------|------------------------------|-----------------|---|
| MENTHLTH        | HFQ                          | PHQPRDIF        | DEPRESSION MAKES LIFE DIFFICULT           |
| MENTHLTH        | HFQ                          | PHQTIRE         | PHQ - TIRED OR LITTLE ENERGY              |
| MENTHLTH        | HFQ                          | PHQTRCON        | PHQ - TROUBLE CONCENTRATING               |
| MOBILITY        | MBQ                          | DASKRIDE        | SP ASKS OTHERS FOR RIDES                  |
| MOBILITY        | MBQ                          | DGIVUPDR        | SP GIVEN UP DRIVING ALTOGETHER            |
| MOBILITY        | MBQ                          | DLIMDRIV        | SP LIMITS DRIVING TO DAYTIME              |
| MOBILITY        | MBQ                          | DREDTRAV        | SP HAS REDUCED DAILY TRAVEL               |
| MOBILITY        | MBQ                          | DTBLGTPL        | SP HAS TROUBLE GETTING PLACES             |
| MOBILITY        | MBQ                          | DUSETRNS        | SP USES TAXI/SPECL TRANSPORT SRVCES       |
| NAGIDIS         | HFQ                          | DISBATH         | DOES SP HAVE DIFFICULTY BATHING           |
| NAGIDIS         | HFQ                          | DISDECISION     | DOES SP HAVE DIFFICULTY CONCENTRATING     |
| NAGIDIS         | HFQ                          | DISERRANDS      | DOES SP HAVE DIFFICULTY DOING ERRANDS     |
| NAGIDIS         | HFQ                          | DISHEAR         | DOES SP HAVE DIFFICULTY HEARING           |
| NAGIDIS         | HFQ                          | DISSEE          | DOES SP HAVE DIFFICULTY SEEING            |
| NAGIDIS         | HFQ                          | DISWALK         | DOES SP HAVE DIFFICULTY WALKING           |
| NICOALCO        | NAQ                          | ALC12MN         | ALCOHOL – PAST YEAR FREQUENCY             |
| NICOALCO        | NAQ                          | ALC12MNU        | HOW OFTEN SP DRANK ALCOHOL PAST YEAR      |
| NICOALCO        | NAQ                          | ALC2HRS         | ALCOHOL - PAST 30 DAYS 5/4 DRINKS OR MORE |
| NICOALCO        | NAQ                          | ALCDAY          | ALCOHOL - PAST YEAR DRINKS PER DAY        |
| NICOALCO        | NAQ                          | ALCLIFE         | HAS HAD AT LEAST 12 DRINKS IN LIFE        |
| NICOALCO        | NAQ                          | ALCNDAY         | ALCOHOL - PAST YEAR 5/4 DRINKS OR MORE    |
| NICOALCO        | NAQ                          | ALCYEAR         | HAS HAD AT LEAST 12 DRINKS IN 1 YEAR      |
| NICOALCO        | NAQ                          | ALPERDAY        | EVER 5/4 DRINKS OR MORE ALMOST EVERY      |
| NICOALCO        | NAQ                          | CIG100          | HAS SMOKED AT LEAST 100 CIGARETTES        |
| NICOALCO        | NAQ                          | CIGAR50         | HAS SMOKED AT LEAST 50 CIGARS             |
| NICOALCO        | NAQ                          | CIGARNOW        | DOES SP USE CIGARS NOW                    |
| NICOALCO        | NAQ                          | CIGARONE        | HAS EVER SMOKE CIGAR                      |
| NICOALCO        | NAQ                          | CIGNOW          | DOES SP SMOKE CIGARETTES NOW              |
| NICOALCO        | NAQ                          | ECIGNOW         | DOES SP USE E-CIGARETTE NOW               |
| NICOALCO        | NAQ                          | ECIGONE         | HAS EVER USED E-CIGARETTE                 |
| NICOALCO        | NAQ                          | PIPENOW         | DOES SP USE PIPE TOBACCO NOW              |
| NICOALCO        | NAQ                          | PIPEONE         | HAS EVER USED PIPE TOBACCO                |
| NICOALCO        | NAQ                          | SMKLSNOW        | DOES SP USE SMOKELESS TOBACCO NOW         |
| NICOALCO        | NAQ                          | SMKLSONE        | HAS EVER USED SMOKELESS TOBACCO           |
| PREVCARE        | HFQ                          | DIAAWARE        | SP AWARE OF DIABETES TEST BEFORE TODAY    |
| PREVCARE        | HFQ                          | DIAEVERT        | EVER HAD BLOOD TEST FOR DIABETES          |

| Location | Questionnaire Section | Variable | Description                           |
|----------|-----------------------|----------|---------------------------------------|
| PREVCARE | HFQ                   | DIARECNT | MOST RECENT TIME TESTED FOR DIABETES  |
| PREVCARE | HFQ                   | DIARISK  | EVER TOLD AT HIGH RISK FOR DIABETES   |
| PREVCARE | HFQ                   | DIASIGNS | RECEIVED INFO ABOUT SIGNS OF DIABETES |
| PREVCARE | PVQ                   | FLUMAIN  | Main reason no flu vaccine            |
| PREVCARE | PVQ                   | SHINGVAC | SP EVER HAD SHINGLES VACCINE          |

## Guidelines for Data Use

This document was produced, published, and disseminated at U.S. taxpayer expense. All material appearing in this document is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

Accordingly, CMS requests that data users cite CMS and the Medicare Current Beneficiary Survey as the data source in any publications or research based upon these data. Suggested citation formats are below.

**Tables and Graphs:** The suggested citation to appear at the bottom of all tables and graphs should read:

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File Data, [Year].

**Bibliography:** The suggested citation for the 2016 MCBS Data User's Guide should read:

SOURCE: Centers for Medicare & Medicaid Services. 2016 Medicare Current Beneficiary Survey Data User's Guide: Survey File. Retrieved from [ADD URL], 2018.

**Survey Data:** The suggested citation for the MCBS survey data files and other documentation should read:

SOURCE: Centers for Medicare & Medicaid Services. Medicare Current Beneficiary Survey, Survey File data. Baltimore, MD: U.S. Department of Health and Human Services, 2016.

# 1. FILE STRUCTURE

## 1.1 LDS Specifications

The MCBS Survey File contains survey collected data augmented with administrative and claims data to allow for analysis regarding the beneficiaries' health status, access to health care, satisfaction with health care and usual source of care. The following information is represented in the MCBS Survey File: Beneficiary Demographics, Household Characteristics, Access to Care, Satisfaction with Care, Usual Source of Care, Health Insurance Timeline (shows types of insurances, the coverage eligibility, and what is covered), Health Status and Functioning and other topical survey sections like Medical Conditions, Health Behaviors, Preventive Services, Interview Characteristics, Beneficiary Knowledge of the Medicare Program, Residence Timeline, Facility Characteristics, and Income and Assets.

## 1.2 File Structure

The Survey File segments can be divided into two subject matter groups: files containing survey data with related Medicare administrative variables and files containing Medicare bill data. The bill records represent services provided during calendar year 2016 and processed by CMS. To facilitate analysis, the Administrative Utilization Summary files (ADMNUTLS) record contains a detailed summary of the utilization enumerated by these bills.

All MCBS segments begin with the same three variables: a unique number that identifies the person who was sampled (the BASEID), the survey reference year (in this release, a constant "2016"), and the version of release. These elements serve to identify the type of record and to provide a link to other types of records. To obtain complete survey information for an individual, an analyst must link together records for that individual from the various data files using the variable BASEID. Beneficiaries may not have a record on every data file. Exhibit 1.2 provides an overview of the Survey File segments and their inclusion of Community-only respondents, Facility-only respondents, or both types of respondents.

**Exhibit 1.2: 2016 MCBS Survey File Segments and Contents**

| <b>Survey File Segment</b>                | <b>Segment Abbrev</b> | <b>Description</b>   | <b>Historic RIC Segment Type</b> | <b>Respondent Type (C, F, B)*</b> |
|---|-----------------------|--|----------------------------------|-----------------------------------|
| <b>Access to Care</b>                     | ACCESSCR              | Survey responses related to ability to obtain health care, delay of care related to costs, and reasons for not obtaining needed health care  | 3                                | C                                 |
| <b>Administrative Utilization Summary</b> | ADMNUTLS              | Summarized administrative information on Medicare, program expenditures, and utilization   | A                                | B                                 |
| <b>Assistance</b>                         | ASSIST                | Identifies the person helping and type of assistance that the beneficiary may receive performing ADLs and IADLs (e.g., assistance with dressing, shopping, eating).  | 2H                               | C                                 |
| <b>Beneficiary Demographics</b>           | DEMO                  | Demographic information collected in the survey and enhanced by Medicare Administrative data.  | 1, 9, A, K                       | B                                 |
| <b>Chronic Conditions</b>                 | CHRNCOND              | Survey responses related to chronic and other diagnosed medical conditions.  | 2, 2P                            | C                                 |
| <b>Dental Care Access</b>                 | DENTAL                | Asks respondents about their access to dental care, and why they may not have had dental care.   | New                              | C                                 |
| <b>Diabetes</b>                           | DIABETES              | Survey responses related to diabetes management such as insulin usage.   | New                              | C                                 |
| <b>Facility Assessments</b>               | FACASMNT              | Assessment information conducted while the beneficiary was a resident in a Medicare approved or non-Medicare approved facility.  | 2F                               | F                                 |
| <b>Facility Characteristics</b>           | FACCHAR               | Contains primarily information from the Facility Questionnaire, plus Skilled Nursing Facility (SNF) stay information, which could include Community residents.   | 7, 7S                            | B                                 |
| <b>Falls</b>                              | FALLS                 | Survey responses related to injuries and attitudes related to falls.   | 2, 2P                            | C                                 |
| <b>Food Insecurity</b>                    | FOODINS               | Information regarding the beneficiary's availability to obtain sufficient food. The FOODINS data that was collected in Summer 2017 is released with the 2016 Survey File given that the reference period is 2016. Special non-response adjustment weights are included with this file. | New                              | C                                 |
| <b>General Health</b>                     | GENHLTH               | Survey responses regarding a beneficiary's general health status and functioning such as height and weight.  | 2                                | C                                 |
| <b>Health Insurance Summary</b>           | HISUMRY               | Information on the characteristics of insurance coverage as well as information regarding premiums, co-pays, deductibles, what is covered, and capitated payments.   | 4, A                             | B                                 |

| Survey File Segment                           | Segment Abbrev | Description   | Historic RIC Segment | Respondent Type (C, F, B)* |
|---|----------------|---|----------------------|----------------------------|
| <b>Health Insurance Timeline</b>              | HITLINE        | Types of insurance plans and the coverage eligibility timeline.   | 4, A                 | B                          |
| <b>Household (HH) Characteristics</b>         | HHCHAR         | Information about the beneficiary's household and home.   | 5                    | B                          |
| <b>Income and Assets</b>                      | INCASSET       | Data on a beneficiary's income and assets. Income and Assets (IAQ) data were collected in Summer 2017 but released with the 2016 Survey File, because the reference period is 2016. Special non-response adjustment weights are included with this file.  | 1, Income Asset      | B                          |
| <b>Interview Characteristics</b>              | INTERV         | Summarizes the characteristics of the interview such as the type of interview conducted and whether or not a proxy was used.  | 4, 8, 9, K           | B                          |
| <b>Medicare Advantage (MA) Plan Questions</b> | MAPLANQX       | Augments information from the Access to Care and Satisfaction with Care sections of the questionnaire for beneficiaries enrolled in Medicare Part C.  | H                    | C                          |
| <b>Medicare Plan Beneficiary Knowledge</b>    | MCREPLNQ       | Information about the beneficiary's experience with the Medicare open enrollment period and knowledge about Medicare covered expenses. The Knowledge of Beneficiaries (KNQ) data were collected in Winter 2017 but released with the 2016 Survey File, because the reference period is 2016. Special non-response adjustment weights are included with this file. | KN                   | C                          |
| <b>Minimum Data Set</b>                       | MDS3           | Assessment information conducted while the beneficiary was in an approved Medicare Facility.  | MDS, 10              | B                          |
| <b>Mental Health</b>                          | MENTHLTH       | Survey responses regarding the beneficiary's mental health such as feelings of anxiety or depression.   | New                  | C                          |
| <b>Mobility</b>                               | MOBILITY       | Information on the beneficiary's use of available transportation options and whether the beneficiary's health affects their daily travel.   | New                  | C                          |
| <b>NAGI Disability</b>                        | NAGIDIS        | Information on difficulties with beneficiary's performance of activities of daily living.   | 2, 2H, 2P            | C                          |
| <b>Nicotine and Alcohol</b>                   | NICOALCO       | Information on the prevalence and frequency of alcohol and nicotine use.  | 2, 2P                | C                          |
| <b>Outcome and Assessment Information</b>     | OASIS          | Assessment information conducted while the beneficiary was receiving home health services.  | OAS, 10              | B                          |

| Survey File Segment                | Segment Abbrev                                 | Description   | Historic RIC Segment | Respondent Type (C, F, B)* |
|------------------------------------|--|---|----------------------|----------------------------|
| <b>Patient Activation</b>          | PNTACT   | This questionnaire section is designed to assess the degree to which Medicare beneficiaries actively participate in their own health care and decisions concerning that care. PAQ data were collected in Summer 2017, but released with the 2016 Survey File because the reference period is 2016. Special non-response adjustment weights are included with this file. | PA                   | C                          |
| <b>Preventive Care</b>             | PREVCARE                                       | Data on preventative services such as vaccinations and routine screening procedures.  | 2, 2P                | C                          |
| <b>Part D Drug Plan Experience</b> | RXPARTD  | Augments information from the Access to Care and Satisfaction with Care sections of the questionnaire for those enrolled in Medicare Part D. Drug Coverage (RXQ) data were collected in Summer 2017, but released with the 2016 Survey File because the reference period is 2016. Special non-response adjustment weights are included with this file.                  | RX                   | C                          |
| <b>Prescription Medicine Usage</b> | PMUSE  | Information about prescription medication usage including how beneficiaries pay for prescriptions and why they may not obtain a prescription.   | 3                    | C                          |
| <b>Residence Timeline</b>          | RESTMLN  | Where the beneficiary resided over the course of the year.  | 6, 9, A, K           | B                          |
| <b>Satisfaction with Care</b>      | SATWCARE                                       | Data on satisfaction with health care and reasons why beneficiaries do not seek medical care.   | 3                    | C                          |
| <b>Usual Source of Care</b>        | USCARE   | Data on where and how the beneficiary typically seeks medical care.   | 2, 3                 | C                          |
| <b>Vision and Hearing</b>          | VISHEAR  | Information on the beneficiary's eye health and hearing status.   | 2                    | C                          |
| <b>Weights</b>                     | CENWGTS<br>EVRWGTS<br><br>LNG2WGTS<br>LNG4WGTS | The weights file provides: longitudinal weights for the continuously enrolled population, general-purpose cross-sectional weights, a series of replicate weights, and weights to represent the ever enrolled population.  | X, XE, X3, X4        | B                          |
| <b>Fee-for-Service Claims</b>      | FFS  | These files include abbreviated FFS claims data. Claims-like data will be included as they become available in subsequent years (e.g., Encounter Data, Medicaid claims data).   | Research Claims      | B                          |

\* = Respondent type describes the expected setting where beneficiaries resided during the course of the calendar year (i.e., C = respondent only resided in the community and only completed Community-administered survey instruments, F = respondent only resided in a facility and only completed Facility-administered survey instruments, or B = respondents completed instruments in both settings). In each data year, some differences by segment will exist (i.e., data may reflect a prior or future calendar year due to the specific questionnaire and reference period used to collect the information).

## 1.3 Claims Files

The fixed-length claims (also known as the research claims or Fee-for-Service claims) are abbreviated versions of the full claim record layout. Each claim type has a subset of variables selected for their relevancy to data analysis of that service. Additionally, institutional claim types have a corresponding revenue center file that links back to the claim-level data file through a unique claim identifier. The Research Claims are provided as SAS<sup>®</sup> files and as CSV files.

### 1.3.1 Utilization Detail Records

#### Core Content

The following rules were used to select bill and claims records for the Claims files.

1. Inpatient bills were included if the discharge or "through" date fell on or after January 1, 2016 and on or before December 31, 2016.
2. Skilled nursing facility bills were included if the admission or "from" date fell on or after January 1, 2016 and on or before December 31, 2016.
3. Home health agency and outpatient facility bills were included if the "through" date fell on or after January 1, 2016 and on or before December 31, 2016.
4. Hospice bills were included if the admission or "from" date fell on or after January 1, 2016 and on or before December 31, 2016.
5. Physician or supplier claims were included if the latest "service thru" date fell on or after January 1, 2016 and on or before December 31, 2016.
6. Durable medical equipment (DME) claims were included if the latest "service thru" date fell on or after January 1, 2016 and on or before December 31, 2016.

A total of 4,599 (about 31.1 percent) of the 2016 survey participants did not use Medicare reimbursed services in a FFS setting in 2016; consequently, there are no bill records for them in this file. These individuals may have used no services at all, services only in a managed care plan, or services provided by a payer other than Medicare.<sup>1</sup> For the other 10,179 individuals in the sample, we have captured bills meeting the date criteria, processed and made available by CMS through June 2017.<sup>2</sup> Medicare payment amounts have been reduced by the sequestration amount of 2 percent for all claims for service dates on or after April 1, 2013.

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<sup>1</sup> The Health Insurance Timeline (HITLINE) segment provides data on types of insurances, the coverage eligibility timeline, and the source information for the coverage use of services (i.e., Medicare Administrative enrollment data and/or survey data). The Access to Care (ACCESSCR) and Medicare Advantage Questions (MAPLANQX) segments also provide self-reported data on access and satisfaction with visits. See Section 3 of this document for more information on the contents of these segments.

<sup>2</sup> Note that claims "mature" through the midpoint of the following calendar year. That is, 2016 claims were pulled from CMS' administrative data after June 2017 to insure that the 2016 claims had been paid and/or updated.

## 2. DATA FILE DOCUMENTATION

### 2.1 LDS Contents

The Survey File LDS contains 4,043 variables across 37 segments. In addition to these data, CMS provides technical documentation with the following resources for data users:

- Codebooks
- Questionnaires
- Data files (SAS<sup>®</sup>, CSV)
- Research claims (SAS<sup>®</sup>, CSV)
- Format control files
- Sample SAS code to apply the formats and labels for those not using SAS.

### 2.2 LDS Components

#### 2.2.1 Codebooks

Codebooks are included with each data release and serve as the key resource for comprehensive information on all variables within a data file. The codebooks list the variables in each of the segments, the possible values, and unweighted frequencies. For variables that are associated with items in the MCBS Questionnaire, the item number and item text are provided.

The information provided within each Codebook is as follows:

**Variable:** The codebook contains the variable names associated with the final version of the data files. Certain conventions apply to the variable names. All variables that are preceded by the character "D\_", such as D\_SMPTYP, are derived variables. Variables preceded by the character "H\_", such as H\_DOB, come from CMS administrative source files.

**Format Name:** This column identifies the format name associated with the variable in the SAS<sup>®</sup> dataset.

**Frequency:** This column shows unweighted frequency counts of values or recodes for each variable.

**Question #:** This column contains a reference to the questionnaire for direct variables, or to the source of derived variables. For example, the entry that accompanies the variable ERVISIT in the Access to Care record is "AC1." The first question in the Access to Care portion of the Community questionnaire is the one referenced. This column will be blank for variables that do not relate to the questionnaire or to the CMS administrative source files, which are usually variables created to manage the data and the file.

**Label (variable label and codes):** The variable label provides an explanation of the variable, which describes it more explicitly than would be possible in only eight letters. For coded variables, all of the possible values of the variable appear in lines beneath that explanation. Associated with each possible value (in the column labeled "Frequency") is a count of the number of times that the variable had that value, and, under the column labeled "Label", a short format expanding on the coded value.

**Version Number:** Often files are re-released due to needed updates, which will be noted by the version number variable.

**Survey Year:** The Survey Year of interest is included as a variable on the file.

**BASEID:** The BASEID is the unique identifier assigned to each beneficiary. This identifier can be used to link data across the survey files.

**Note:** Each variable is followed by a statement that describes when a question was not asked, resulting in a missing variable. Questions were not asked when the response to a prior question or other information gathered earlier in the interview would make them inappropriate. For example, if the respondent said he has never smoked (Community interview, question HFG1), he would not be asked if he smokes now (question HFG2). Notes also describe important information about the variable.

Many questions were written to elicit simple “Yes” or “No” answers, or to limit responses to one choice from a list of categories. In other questions the respondent was given a list of responses and instructed to select all responses that applied. In these cases when the question was a “select all that apply” item, each of the responses is coded “Indicated”/“Selected” or “Not Indicated”/“Not Selected”.

If a respondent provided an answer that was not on the list of possible choices, it was recorded verbatim. For the 2016 data, a new programmatic backcoding approach was developed for some variables to streamline the review and categorization of verbatim responses. The 2016 backcoding implementation involved programmatically fixing misspellings of commonly used terms and then categorizing responses into existing response option categories as appropriate using keyword searches for terms matching those categories.

### *2.2.2 Questionnaires*

Data users can view the Questionnaire for each data year along with the questionnaire variable names and question text on the MCBS website at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Questionnaires.html>.

### *2.2.3 Data User Resources*

CMS provides technical assistance to researchers interested in using MCBS data, and provides free consultation to users interested in obtaining these data products and using these data in research. Users can email [MCBS@cms.hhs.gov](mailto:MCBS@cms.hhs.gov) with questions regarding obtaining or using the data.

## **2.3 Data Edits and Imputation**

### *2.3.1 Data Edits*

A series of edits are conducted on the data files in order to check the data for accuracy, completeness, and reasonableness. Column and row checks are conducted to confirm each analytic file was structurally sound. Column checks include confirming that all necessary variables are on the file, checking variable attributes, and identifying high rates of missingness or out of range values. Row checks include confirming the inclusion of expected beneficiary IDs and checking for duplicate or missing primary and foreign keys. Any structural issues are addressed during either data extraction or data cleaning.

Logic and reasonableness checks are also performed for each data file. Logic checks verify that the questionnaire worked as expected, particularly with respect to questionnaire routing. Errors identified during logic checking result in two categories of data edits: flagging values that were incorrectly skipped or setting incorrectly populated values to null to indicate a valid missing.

Global edits are applied to edit unreasonable or impossible extreme values to bind the data to reasonable responses and to check for values that are not explicitly disallowed by the questionnaire. For example, male respondents should not report female-only conditions, like cervical cancer. We also conduct consistency checks

and edits. If a respondent reports becoming Medicaid eligible due to a certain condition, then they should have reported having that certain condition. Based on a thorough data review, these types of errors are corrected during data cleaning.

Once data review and issue resolution are complete for each data file, the data are run through a cleaning program. During data cleaning, edits are applied to the filtered data files, and additional quality control is conducted to ensure that the edits applied correctly. A flag variable is created for each edit to indicate whether the variable was edited for a particular observation.

Certain conventions were used in coding all variables to distinguish between questions that beneficiaries would not or could not answer and questions that were not asked. These conventional codes are depicted in Exhibit 2.3.1.

### Exhibit 2.3.1: Data Review and Editing Codes

| Value | Format       | Meaning  |
|-------|--------------|--|
| .     | INAPPLICABLE | Valid missing, inapplicable, a valid skip, missing with no expectation that a value should be present. Missing is '.' in numeric variables and blank in character variables. |
| .R    | REFUSED      | Valid missing, refused survey response   |
| .D    | DON'T KNOW   | Valid missing, don't know survey response  |
| .N    | INVALID SKIP | Invalid missing, not ascertained, an invalid skip, as response should be present but is not  |
| .E    | EDITING CODE | Editing code, extreme value, unreasonable or out of range survey response  |

### 2.3.2 Imputation

In order to compile the most accurate and complete LDS, there are several types of adjustments applied to the MCBS data that compensate for missing information. Although a variety of methods are used in making the adjustments, adjustments of all types are governed by some basic principles. Information reported by the survey respondent is retained, even if it is not complete, unless strong evidence suggests that it is not accurate. When information is not reported during the interview, Medicare claims data and administrative data are the first choice as a source of supplementary, or in some cases, surrogate information.

We imputed income when income data are missing. We first imputed whether an income source (such as Social Security) existed. If the income source exists, then the amount earned was imputed next. Imputation was performed using the hot deck imputation method, and a flag was created for each imputed variable indicating whether or not the corresponding value was imputed.

## 3. DATA FILE NOTES

This section is a collection of information about various data fields present in the Survey File segments. We do not attempt to present information on every survey data field; rather, we concentrate our efforts on data fields where additional clarity or detail may be useful. We start with information that is applicable globally, followed by specific information on individual segments, presented in the same sequence as the segments appear in the Codebook.

### 3.1 Global Information

#### *BASEID*

The BASEID key identifies the person interviewed. It is an 8-digit element, consisting of a unique, randomly assigned 7-digit number concatenated with a single-digit check digit.

LDS segments may vary in the number of BASEIDs. This variation may occur for several reasons. First, some segments include data from Community questionnaires and others from Facility questionnaires with different numbers of beneficiaries providing responses. Second, there are also differences in the number of beneficiaries by the specific round completed. Third, the use of ever enrolled or continuously enrolled weights in constructing the segments may result in differences.

#### *Missing Values*

Various special values indicate the reason why some data are missing, such as .R for "refused," .D for "don't know". See Exhibit 2.3.1 above for additional values.

#### *Derived and Administrative Variables*

Variables that were derived or created by combining two or more survey variables are preceded with the characters "D\_", such as D\_SMPTYP. CMS may create or modify variables in order to recode data items (e.g., to protect the confidentiality of survey participants) or to globally edit some variables. Variables preceded by the character "H\_", such as H\_DOB, come from CMS administrative source files.

#### *Initial Interview Variables*

Some questions are asked only in the Baseline (initial) interview and are not asked again during subsequent sessions because the responses are not likely to change. Such questions include "Have you ever served in the armed forces?" and "What is the highest grade of school you ever completed?" Similarly, once Incoming Panel Sample respondents have told us that they have a chronic condition (such as diabetes), the interviewer will not ask, "Have you ever been told you have diabetes?" in a subsequent interview. To maximize the usefulness of this release as a cross-sectional file, we pull these data forward from the Baseline interviews, for persons joining the survey in the 2013, 2014 and 2015 panels. Variables that have been reproduced this way are annotated as (Initial interview variable) in Section 3 of this document.

#### *Data Editing*

Data are edited for consistency and to provide users with files that are easily used for analysis. Questions that are asked differently in the Baseline and Continuing segments are often combined into recoded variables to provide a complete picture of the responses.

## *Open-Ended Questions*

Respondents are asked a number of open-ended questions. For example, respondents are asked about different reasons why they may be dissatisfied with care and about types of problems experienced in getting health care. The respondents answer these questions in their own words, and interviewers record the responses verbatim. Codes are then assigned to similar responses to facilitate analysis; there are no verbatim responses provided on the files. Often there will be more than one answer to a single question. In these cases, we supply several variables, all of which contain categorized data.

## *Consistency with Medicare Program Statistics*

In general, MCBS estimates may differ from Medicare program statistics using 100 percent administrative enrollment data. There are several reasons for the differences such as sampling error. The most important reason for the difference is that the administrative enrollment data may include people who are no longer alive. This may occur where people have entitlement, such as for Part A only, and receive no Social Security check. When field interviewers try to locate these beneficiaries for interviews, they establish the fact of these deaths. Unrecorded deaths may still be present on the Medicare Administrative enrollment data. We make every effort to reconcile the survey information against the administrative data when possible.

## *Does administrative data override survey-reported data?*

In linking survey-reported and administrative data, we keep records from both sources to provide more complete data. Indicators in the file will usually tell you if the information is survey-reported only, administrative data only, or both. Data that are only administrative are indicated as such in the data documentation and codebook. In the HITLINE segment, administrative data does override survey-reported data if there is a discrepancy. For instance, if the respondent reported that the beneficiary is covered by Medicaid from January through December of the calendar year, but the administrative data shows coverage only for January through June, then the ENDDATE of coverage will be set to June 30. The Coverage source variables will indicate the differences. In this example, the SRCCOV01 – SRCCOV06 variables will have a value of 3 (Both Survey and Admin), but the variables SRCCOV07 – SRCCOV12 will have a value of 1 (Survey data only). The variables COV01 – COV06 will have a value of 1 (Eligible) and COV07 – COV12 will have a value of 0 (Ineligible).

## **3.2 Survey File Segment Information**

Below you will find information regarding each segment within the Survey File release, presented in alphabetical order. The notes have been organized into three main categories of information.

1. Core Content – a description of the main subject of the data.
2. Variable Definitions – definitions of derived variables and/or variables that require additional explanation regarding their construction. Note: The variables listed are not a comprehensive list of all variables in each segment. The Codebook provides information on all variables in each segment.
3. Special Notes – additional background information that data users may find helpful for constructing analyses.

## Access to Care (ACCESSCR)

### *Core Content*

The Access to Care segment contains information from the Access to Care section of the questionnaire. General questions were asked of beneficiaries regarding their access to all types of medical services in 2016 and about reasons for their visits. This segment also contains respondents' assessments of the quality of the medical care that they were receiving.

### *Variable Definitions*

#### **Definitions applied to medical providers:**

**Company clinic:** A doctor's office or clinic, which is operated principally for the employees (and sometimes their dependents) of a particular company or business.

**Doctor:** This includes both medical doctors (M.D.) and doctors of osteopathy (D.O.). It does not include chiropractors, nurses, technicians, optometrists, podiatrists, physician's assistants, physical therapists, psychologists, mental health counselors or social workers. Generic specialties shown in parentheses following one of the specialties were coded as the specialty. For example, if the respondent mentioned a "heart" doctor, cardiology was coded. Generic answers not listed were not converted to specialties.

**Doctor's clinic practice:** This refers to any group of doctors or other health professionals who have organized their practice in a clinic setting and work cooperatively; generally, patients either come in without an appointment or make an appointment and see whatever health professional is available.

**Doctor's office or group practice:** This refers to an office maintained by a doctor or a group of doctors practicing together; generally the patient makes an appointment to see a particular physician.

**Free-standing surgical center:** A facility performing minor surgical procedures on an outpatient basis, and not physically connected to a hospital. Note that a unit performing outpatient procedures connected with a hospital (either physically or by name) is referred to as a hospital outpatient department/clinic.

**Medicare Managed Care Organization (MCO)/Health Maintenance Organization (HMO):** This is an organization that provides a full range of health care coverage in exchange for a fixed fee/co-pay. Some managed care plans require that plan members receive all medical services from one central building or location. Formerly referenced only as HMOs, these organizations are now referred to with terms such as Medicare MCOs/HMOs/Medicare Advantage/Part C.

**Home (doctor comes to respondent's home):** This includes situations where the doctor comes to the beneficiary, rather than the beneficiary going to the doctor. Here, "home" refers to anywhere the beneficiary was usually staying at the time of the medical provider's visit. It may be his/her home, the home of a friend, a hotel room, etc.

**Hospital emergency room:** This means the emergency room of a hospital. "Urgent care" centers are not included. (NOTE: All hospital emergency room visits were included, even if the respondent went there for a "non-emergency" condition such as a cold, flu or intestinal disorder.) A physician, nurse, paramedic, physician extender, or other medical provider may administer the health care.

**Hospital outpatient department:** A unit of a hospital, or a facility connected with a hospital, providing health and medical services, health education, health maintenance, preventive services, diagnosis, treatment, surgery, and rehabilitation to individuals who receive services from the hospital but do not require

hospitalization or institutionalization. Outpatient clinics can include obesity clinics; eye, ear, nose and throat clinics; alcohol and drug abuse clinics; physical therapy clinics; kidney dialysis clinics, and radiation therapy clinics. The outpatient department may or may not be physically attached to a hospital, but it must be associated with a hospital.

Neighborhood/family health center: A non-hospital facility which provides diagnostic and treatment services, frequently maintained by government agencies or private organizations.

Other clinic: A non-hospital facility clinic that is not already listed in the other clinic categories. Some examples include a "free" clinic, a family planning clinic, or military base clinic.

Rural health clinic: A clinic that provides outpatient services, routine diagnostic services for individuals residing in an area that is not urbanized and is designated as a health staff shortage area or an area with a shortage of personal health services. The clinic can also provide outpatient services that include physician services, services and supplies provided under the direction and guidance of a physician by nurse practitioner, physician assistants, and treatment of emergency cases. These services are usually provided at no charge except for the amount of any deductible or coinsurance amount.

Walk-in urgent center: A facility not affiliated with a nearby hospital, offering services for acute conditions (e.g., flu, virus, sprain). Typically, people are seen without appointments (i.e., walk-ins).

### Other variables:

Verbatim questions OFFEXVB1, OFFEXVB2, OFFEXVC1, OFFEXVC2, and OFFEXVC3 were back coded as necessary, but the verbatim text was not released.

OPDSCOND – (AC10): Was visit to OPD for a specific condition?

This question applies only to the Incoming Panel Sample where either the reason for an OPD visit was not a medical condition (OPDMCOND is not equal to 1) OR the reason for an OPD visit was for a medical condition (OPDMCOND equal 1), but it was not for surgery (OPDSURGY is not equal to 1).

MDSPCLTY – (AC20): What is the specialty of the physician who saw the SP most recently in a setting other than at home or in a hospital?

This question applies to:

1. All Incoming Panel Sample respondents; or
2. Continuing Panel respondents with no emergency room, outpatient department, or medical provider visits in either of the previous two data collection seasons (i.e., Rounds) AND AC20, AC21, AC24-AC36 not already asked in the current data collection season in the medical provider utilization section of the questionnaire.

MDSCOND – (AC22): Was visit to doctor's office for a specific condition? This question applies only to the Incoming Panel Sample where either the reason for an OPD visit was not for a medical condition (OPDMCOND is not equal to 1) OR the reason for an OPD visit was for a medical condition (OPDMCOND equals 1), but it was not for surgery (OPDSURGY is not equal to 1).

### *Special Notes*

Open-ended questions: Respondents were asked a number of open-ended questions (reasons for dissatisfaction with care, kinds of problems experienced in getting health care, etc.). The respondents

answered these questions in their own words, and interviewers recorded the responses verbatim. The interviewer was prohibited from paraphrasing or summarizing the respondents' answer.

This file contains no verbatim responses. We have supplied, instead, codes that summarize the answer. Often there will be more than one code because the answer included several specific topics.

## Differences in the questionnaire sequence for the Continuing and Incoming Panel

### Sample:

It should be noted in using data in this segment that the questionnaire sequence on the Survey File for the Continuing Panel differs from that of the Incoming Panel Sample and may lead to apparent differences in expected number of responses to questions in the Survey File Codebook section. For example, Continuing Panel persons indicating use of emergency room (and later, outpatient hospital) care in the utilization section of the Core questionnaire are asked appropriate Survey File questions about the visit after completing utilization questions in that section. The Computer-Assisted Personal Interviewing (CAPI) program then reverts back to the next utilization section in the Core questionnaire.

In contrast, the Incoming Panel Sample respondents are not asked the Core questions during their Baseline interview and go through the entire sequence of Survey File questions.

## Administrative Utilization Summary (ADMNUTLS)

### *Core Content*

The Administrative Utilization Summary segment contains information on Medicare program expenditures and utilization taken directly from the Medicare Administrative enrollment data.

### *Variable Definitions*

Except as noted otherwise, the variables in this segment were derived from summarizing data from CMS's Medicare Administrative enrollment data and the Medicare Administrative utilization and payment records. Administrative data available as of December 31, 2016 were summarized to create these data items.

### *Special Notes*

#### **Utilization Summary:**

For easier comparison of groups of people by the number and cost of medical services they have received, the Administrative Utilization Summary includes a summary of all Medicare bills and claims for calendar year 2016, as received and processed by CMS through July 2017 for the 2016 benefit year. The administrative data source for this information changed in 2016. There are different breakouts and summary items than on previous versions of MCBS data.

The utilization summary represents services rendered and reimbursed under Medicare FFS in the calendar year 2016. If a beneficiary used no Medicare services at all or was a member of a coordinated or managed care plan that does not submit claims to a fiscal intermediary or carrier, all program payment summary variables will be empty/missing. If the beneficiary used no services of a particular type (e.g., inpatient hospitalization), the variables relating to those benefits will be empty/missing.

H\_ACOFLG: Indicator for Shared Savings Program (SSP) participation taken from the Accountable Care Organizations (ACO) SSP data. Default is 0, participation indicated by 8.

H\_HHASW: One or more home health agency visits in the calendar year is indicated by a 1. This is triggered by a value (greater than zero) found in the home health visits field (H\_HHVIS). Otherwise the value for H\_HHASW is 2.

H\_HOSSW: One or more hospice bills in the calendar year is indicated by a 1. This is triggered by a value (greater than zero) found in the hospice Medicare payments (H\_HOSPMT) field or the hospice stays (H\_HOSSTY) field. Otherwise the value for H\_HOSSW is 2.

H\_INPSW: One or more inpatient discharges in the calendar year is indicated by a 1. This is triggered by a value (greater than zero) found in the acute inpatient stays (H\_ACTSTY) field or the other inpatient stays (H\_OIPSTY) field. Otherwise the value for H\_INPSW is 2.

H\_OUTSW: One or more outpatient visits in the calendar year is indicated by a 1. This is triggered by a value (greater than zero) found in the hospital outpatient visits (H\_HOPVIS) field or hospital outpatient emergency room visits (H\_HOP\_ER) field. Otherwise the value for H\_OUTSW is 2.

H\_PBSW: One or more Part B claims in the calendar year is indicated by a 1. This is triggered by a value (greater than zero) found in any of the following fields: H\_PHYPMT, H\_PHYEVT, H\_PB\_DEV, H\_PB\_DRG, H\_PB\_OTH, H\_PB\_OEV, H\_DMEEVT, H\_DMEPMT, H\_TST EVT, H\_TSTPMT, H\_ANEVT, H\_ANEPMT, H\_ASCEVT, H\_ASCPMT, H\_DIAEVT, H\_DIAPMT, H\_EMEVT, H\_EMPMT, H\_IMG EVT, H\_IMG PMT, H\_PTBRMB. Otherwise the value for H\_PBSW is 2.

H\_SNFSW: One or more skilled nursing facility (SNF) admissions in the calendar year is indicated by a 1. This is triggered by a value (greater than zero) found in any of the following fields: H\_SNFPMT, H\_SNFSTY, H\_SNFDAY. Otherwise the value for H\_SNFSW is 2.

H\_PTARMB: Total Part A reimbursement in the calendar year. It is a sum of calendar year reimbursements for: HHA Part A, Hospice, Inpatient, and SNF. The CLM\_PMT\_AMT field was selected for each claim type in preparing this calculation. The CLM\_VAL\_CD = '64' was used to determine HHA Part A.

H\_PTBRMB: Total Part B reimbursement in the calendar year. It is a sum of calendar year reimbursements for: HHA Part B, Physician, and Outpatient. The CLM\_PMT\_AMT field was selected for each claim type in preparing this calculation. The CLM\_VAL\_CD = '65' was used to determine HHA Part B. 'Physician' as noted in the 'sum' statement above consisted of BCARRIER\_CLAIMS and DME\_CLAIMS.

H\_ACTPMT: Acute Inpatient Medicare Payments is the sum of the Medicare claim payment amounts (CLM\_PMT\_AMT from each source claim) in the acute inpatient hospital setting for a given year. To obtain the total acute hospital Medicare payments, take this variable and add in the annual per diem payment amount (H\_ACTMPT + H\_ACTPRD).

H\_ACTPRD: Acute Inpatient Hospital Pass-thru Per Diem Payments is the sum of all the pass through per diem payment amounts (CLM\_PASS\_THRU\_PER\_DIEM\_AMT from each source claim) in the acute inpatient hospital setting for the year. Medicare payments are designed to include certain "pass-through" expenses such as capital-related costs, direct medical education costs, kidney acquisition costs for hospitals that are renal transplant centers, and bad debts. This variable is the sum of all the daily payments for pass-through expenses. It is not included in the Medicare Payment amount (H\_ACTPMT). To determine the total Medicare payments for acute hospitalizations for the beneficiary, this field must be added to the total Medicare payment amount for acute inpatient hospitalizations

H\_ACTSTY: Acute Inpatient Stays is the count of acute inpatient hospital stays (unique admissions, which may span more than one facility) for the year. An acute inpatient stay is defined as a set of one or more consecutive acute inpatient hospital claims where the beneficiary is only discharged on the most recent claim

in the set. If a beneficiary is transferred to a different provider, the acute stay is continued even if there is a discharge date on the claim from which the beneficiary was transferred.

**H\_ACTDAY:** Acute Inpatient Medicare Covered Days is the count of Medicare covered days in the acute inpatient hospital setting for the year.

**H\_IP\_ER:** Inpatient Emergency Room Visits is the count of emergency department (ED) claims in the inpatient setting for the year. The revenue center codes indicating Emergency Room use were (0450, 0451, 0452, 0456, and 0459).

**H\_OIPPMT:** Other Inpatient Hospital Medicare Payments is the sum of the Medicare claim payment amounts (CLM\_PMT\_AMT from each source claim) in the other inpatient (OIP) settings for a given year. To obtain the total OIP Medicare payments, take this variable and add in the annual per diem payment amount (H\_OIPPMT + H\_OIPPRD). These OIP claims are a subset of the claims in the IP claims consisting of data from IP settings such as long-term care hospitals, inpatient psychiatric facilities, inpatient rehabilitation facilities, and other types of IP facilities such as children's hospitals or cancer centers.

**H\_OIPPRD:** Other Inpatient Pass-thru Per Diem Payments is the sum of all the pass through per diem payment amounts (CLM\_PASS\_THRU\_PER\_DIEM\_AMT from each source claim) in the other inpatient (OIP) setting for the year. Medicare payments are designed to include certain "pass-through" expenses such as capital-related costs, direct medical education costs, kidney acquisition costs for hospitals that are renal transplant centers, and bad debts. This variable is the sum of all the daily payments for pass-through expenses. It is not included in the Medicare Payment amount (H\_OIPPMT). To determine the total Medicare payments for other (non-acute) hospitalizations for the beneficiary, this field must be added to the total Medicare payment amount for other hospitalizations.

**H\_OIPSTY:** Other Inpatient Stays is the count of hospital stays (unique admissions, which may span more than one facility) in the non-acute inpatient setting for a given year. A non-acute inpatient stay is defined as a set of one or more consecutive non-acute inpatient claims where the beneficiary is only discharged on the most recent claim in the set.

**H\_OIPDAY:** Other Inpatient Hospital Covered Days is the count of covered days in the non-acute inpatient hospital setting for the year. This variable equals the sum of the CLM\_UTLZTN\_DAY\_CNT variables on the source claims. These OIP claims are a subset of the IP claims consisting of data from IP settings such as long-term care hospitals, inpatient psychiatric facilities, inpatient rehabilitation facilities, and other types of IP facilities such as children's hospitals or cancer centers.

**H\_SNFPMT:** SNF Medicare Payments is the total Medicare payments in the SNF setting for the year.

**H\_SNFSTY:** SNF Stays is the count of SNF stays (unique admissions, which may span more than one facility) for a given year. A SNF stay is defined as a set of one or more consecutive SNF claims where the beneficiary is only discharged on the most recent claim in the set.

**H\_SNFDAY:** SNF Medicare Covered Days is the count of Medicare covered days in the SNF setting for the year. This variable equals the sum of the CLM\_UTLZTN\_DAY\_CNT variables on the source claims.

**H\_HOSPMT:** Hospice Medicare Payments is the total Medicare payments in the hospice (HOS) setting for the year.

**H\_HOSSTY:** Hospice Stays is the count of stays (unique admissions, which may span more than one facility) in the hospice setting for a given year. A hospice stay is defined as a set of one or more consecutive hospice claims where the beneficiary is only discharged on the most recent claim in the set.

H\_HOSDAY: Hospice Medicare Covered Days is the count of Medicare covered days in the hospice setting for a given year. This variable equals the sum of the CLM\_UTLZTN\_DAY\_CNT variables on the source claims.

H\_HHPMT: Home Health Medicare Payments is the total Medicare payments in the home health (HH) setting for a given year.

H\_HHVIS: Home Health Visits is the count of home health (HH) visits for the year.

H\_HOPPMT: Hospital Outpatient Medicare Payments is the total Medicare payments in the hospital outpatient (HOP) setting for a given year.

H\_HOPVIS: Hospital Outpatient Visits is the count of unique revenue center dates (as a proxy for visits) in the HOP setting for the year.

H\_HOP\_ER: Hospital Outpatient Emergency Rm Visits is the count of unique emergency department revenue center dates (as a proxy for an ED visit) in the hospital outpatient claims for the year. Revenue center codes indicating Emergency Room use were (0450, 0451, 0452, 0456, or 0459).

H\_PB\_DRG: Part B Drug Medicare Payments is the total Medicare payments for Part B drugs for a given year. Part B drug claims are a subset of the claims in the Part B Carrier and DME claims.

H\_PB\_DEV: Part B Drug Events is the count of events in the Part B drug setting for a given year. An event is defined as each line item that contains the relevant service. Part B drug claims are a subset of the claims in the Part B Carrier and DME claims.

H\_EMPMT: Evaluation and Management Medicare Payments is the total Medicare payments for the Part B evaluation and management (E&M) services for a given year. E & M claims are a subset of the claims in the Part B Carrier and DME claims, and a subset of physician claims.

H\_EMEVT: E&M Events is the count of events for the Part B evaluation and management services for a given year. An event is defined as each line item that contains the relevant service.

H\_PHYPMPT: Part B Physician Medicare Payments is the total Medicare payments for the Part B physician office services (PHYS) for a given year. Physician office claims are a subset of the claims in the Part B Carrier and DME claims, and a subset of physician evaluation and management claims (note that E&M are tabulated separately).

H\_PHYEVT: Part B Physician Events is the count of events in the part B physician office services (PHYS) for a given year. An event is defined as each line item that contains the relevant service. Physician office claims are a subset of the claims in the Part B Carrier and DME claims, and a subset of physician evaluation and management claims (note that E&M are tabulated separately).

H\_OPRPMT: Other Procedures Medicare Payments is the total Medicare payments for services considered part B other procedures (i.e., not anesthesia or dialysis) for a given year. Claims for other procedures are a subset of the claims, and a subset of procedures in the Part B Carrier claims.

H\_OPREVT: Other Procedures Events is the count of events for part B other procedures for a given year. An event is defined as each line item that contains the relevant service. Claims for other procedures are a subset of the claims in the Part B Carrier claims.

H\_DMEPMT: Durable Medical Equipment Medicare Payments is the total Medicare payments for Part B durable medical equipment (DME) for a given year. Claims for DME are a subset of the claims in the Part B Carrier and DME claims.

H\_DMEEVT: Durable Medical Equipment Events is the count of events in the part B durable medical equipment (DME) for a given year. An event is defined as each line item that contains the relevant service. Claims for DME are a subset of the claims in the Part B Carrier and DME claims.

H\_PB\_OTH: Other Part B Carrier Medicare Payments is the total Medicare payments from Part B Carrier and DME claims which appear in specific settings for a given year. Claims for other carrier/DME claims are a subset of the claims in the Part B Carrier and DME claims. Types of services which may have been summarized in this other carrier category (OTHC) include ambulance, chiropractor, chemotherapy, vision, hearing and speech services, etc.

H\_PB\_OEV: Other Part B Carrier Events is the count of events in the part B other setting for a given year, which includes Part B Carrier and DME claims which appear in specific settings for a given year. Claims for other carrier/DME claims are a subset of the claims in the Part B Carrier and DME claims. Types of services which may have been summarized in this other carrier category (OTHC) include ambulance, chiropractor, chemotherapy, vision, hearing and speech services, etc. An event is defined as each line item that contains the relevant service.

H\_PTDPMT: Part D Medicare Payments is the dollar amount that the Part D plan covered for all covered drugs for a given year. The variable is calculated as the sum of the plan payments for covered Prescription Drug Events (PDEs) (CVRD\_D\_PLAN\_PD\_AMT) and the low income cost sharing subsidy amount (LICS\_AMT) during the year.

H\_PTDEVT: Part D Events is the count of events for Part D drugs for a given year (i.e., a unique count of the PDE\_IDs). An event is a dispensed (filled) drug prescription that appears on the source Prescription Drug Event (PDE) claims.

H\_PTDTOT: Part D Total Prescription Costs is the gross drug cost (TOT\_RX\_CST\_AMT on the source claims) of all Part D drugs for a given year. This value includes the ingredient cost, dispensing fee, sales tax (if applicable), and vaccine administration fee.

H\_ANEPMT: This is the total Medicare payments for part B anesthesia services for a given year. Anesthesia claims are a subset of the claims, and a subset of procedures in the Part B Carrier claims.

H\_ANEVT: This is the count of events for part B anesthesia services for a given year. An event is defined as each line item that contains the relevant service.

H\_ASCEVT: This is the count of events in the part B ambulatory surgery center setting for a given year. An event is defined as each line item that contains an ambulatory surgery center service.

H\_ASCPMT: This is the total Medicare payments in the part B ambulatory surgery center setting for a given year. Ambulatory surgery center claims are a subset of the claims in the Part B Carrier claims.

H\_DIAEVT: This is the total Medicare payments for Part B dialysis services (primarily the professional component since treatments are covered in hospital outpatient) for a given year. An event is defined as each line item that contains the relevant service. Dialysis claims are a subset of the claims, and a subset of procedures in the Part B Carrier claims.

H\_DIAPMT: This is the total Medicare payments for Part B dialysis services (primarily the professional component since treatments are covered in hospital outpatient) for a given year. Dialysis claims are a subset of the claims, and a subset of procedures in the Part B Carrier claims.

H\_IMGEVT: This is the count of events for imaging services for a given year. An event is defined as each line item that contains the relevant service. Claims for imaging procedures are a subset of the claims, and a subset of procedures in the Part B Carrier and DME claims.

H\_IMGPMPT: This is the total Medicare payments for imaging services for a given year. Claims for imaging procedures are a subset of the claims, and a subset of procedures in the Part B Carrier and DME claims.

H\_PTDFIL: Part D prescribing events (PDE) consist of highly variable days' supply of the medication. This derived variable creates a standard 30 days' supply of a filled Part D prescription, and counts this as a "fill". The Part D fill count does not indicate the number of different drugs the person is using, only the total months covered by a medication (e.g., if a patient is receiving a full year supply of a medication, whether this occurs in one transaction or 12 monthly transactions, the fill count = 12; if the patient is taking three such medications, the fill count=36).

H\_READMT: This is the count of hospital readmissions in the acute inpatient setting for a given year.

H\_TSTEVT: This is the count of events for part B tests for a given year. An event is defined as each line item that contains the relevant service. Claims for tests are a subset of the claims in the Part B Carrier claims.

H\_TSTPMT: This is the total Medicare payments for part B tests for a given year. Claims for tests are a subset of the claims in the Part B Carrier claims.

For additional information on administrative data items please see the Master Beneficiary Summary - Cost and Use Segment Data Dictionary Codebook: <https://www.ccwdata.org/web/guest/data-dictionaries>.

## Assistance (ASSIST)

### *Core Content*

This segment contains information on each person identified as helping the beneficiary to perform ADLs or IADLs, including the helper's age, relationship to the beneficiary and the types of assistance that the beneficiary receives (e.g., assistance with dressing, shopping, eating) from each identified helper. NOTE: The number of records in the ASSIST segment reflects the number of persons identified as having assisted the beneficiary in performing one or more ADL or IADLs. Therefore, it is possible to have one, several, or no records per beneficiary. Please see Special Notes below for specific information pertaining to these data.

### *Variable Definitions*

HLPRNUM: This variable is the Helper Identification Number and is derived from the survey's administrative files. The survey develops a person roster containing information about each person living with, treating or helping the beneficiary.

HLPRMOST: When a beneficiary has more than one helper, this variable identifies which helper provides the beneficiary with the most help with daily activities. This variable is coded as a 1 for the helper who gave the most help, and is missing for all other helpers for that beneficiary. This variable also contains missing values for helpers who were a beneficiary's only helper. If a beneficiary with multiple helpers has not indicated which helper provides the most help, then this variable contains missing data for all of that beneficiary's helpers.

## *Special Notes*

During final processing, it was discovered that rostering information for newly rostered helpers was incorrectly excluded. This resulted in missing records in the ASSIST segment and missing data for the variable HLPREL in some records in the ASSIST segment in data years 2015 and 2016.

## **Chronic Conditions (CHRNCOND)**

### *Core Content*

The Chronic Conditions segment provides data on whether the beneficiary had a series of chronic and other diagnosed medical conditions such as cancer, high blood pressure, and depression. If the beneficiary responds that they have the condition, a series of follow-up questions is asked.

### *Variable Definitions*

Note: the answers in the health status and functioning section of the questionnaire reflect the respondent's opinion, not a professional medical opinion.

**BLOOD PRESSURE:** A number of variables asking about blood pressure appear in this segment.

**HYSTEREC:** Female respondents were asked if they have ever had a hysterectomy in the last year.

"Hysterectomy" includes partial hysterectomies. (Initial interview variable). This variable does not apply to and is not asked of:

- male beneficiaries
- female beneficiaries in the Incoming Panel Sample other than those who reported that they have never had a hysterectomy
- female beneficiaries in the continuing sample who previously reported having had a hysterectomy in an earlier round

**D\_OCDTYP:** This new variable, indicating type of diabetes, for 2016 is derived from HFQ items OCDTYPE and DIAPRGNT. The OCDTYPE categories for "Pre-diabetes" and "Borderline" diabetes are combined into one category for D\_OCDTYP. Female beneficiaries who answered "Yes" for DIAPRGNT, which is not released, are coded as "Gestational diabetes" for D\_OCDTYP, unless they indicated for OCDTYPE that they had Type 1 diabetes.

**ILLNESS/CONDITION VARIABLES:** The MCBS asks respondents whether they have ever had any of a series of illnesses or conditions. Their responses are coded affirmatively if the respondent had at some time been diagnosed with the conditions, even if the condition had been corrected by time or treatment. The condition must have been diagnosed by a physician, and not by the respondent. Misdiagnosed conditions are not included. If the respondent was not sure about the definition of a condition, the interviewer offered no advice or information, but recorded the respondent's answer, verbatim. The MCBS asks about: heart disease and high blood pressure; disorders or diseases of the brain; psychiatric disorders; intellectual disability ; skin cancer; cancer, other than skin cancer; diabetes; arthritis; osteoporosis; a broken hip; emphysema, asthma, or chronic obstructive pulmonary disease (COPD); complete or partial paralysis; an amputation; enlarged prostate or benign prostatic hypertrophy.

If the respondent confirms having had cancer, other than skin cancer, a series of follow-up questions is asked to identify the affected body parts.

All respondents are asked about various illnesses or conditions, such as hypertension, in the fall round. There are different versions of each question, depending on whether a respondent is in the Incoming Panel Sample (new panel) or Continuing sample. Incoming Panel Sample respondents are asked if a doctor ever told them that they had a specific condition (hypertension, for example). If the answer is "Yes", then the Incoming Panel Sample respondent is asked if the doctor had told them in the past year that they had the condition. Annually thereafter, the same respondents are asked only if a doctor told them in the past year that they had a specific condition. All data from a beneficiary from the current survey year and all previous years are used to determine whether the beneficiary had ever been told by a doctor that they had a condition. The CHRNCND data file includes variables that indicate whether a beneficiary ever had specific conditions.

LOSTURIN: "More than once a week" was coded if the beneficiary could not control urination at all. Leaking urine, especially when the person laughs, strains or coughs, does not qualify as incontinence.

### *Special Notes*

N/A

## Demographics (DEMO)

### *Core Content*

The Demographic segment contains demographic information collected in the survey as well as demographic information from Medicare Administrative enrollment data, and constructed items of interest.

### *Variable Definitions*

H\_DOB, H\_DOD, H\_AGE, and D\_STRAT: The MCBS furnishes four variables relating to the beneficiary's age in the Demographics segment. The "legal" dates of birth and death from Medicare and Social Security Administration records are recorded as H\_DOB and H\_DOD, respectively. The variable H\_AGE represents the "legal" age as of December 31, 2016, adjusted for date of death, if present. The variable D\_STRAT groups the beneficiaries by various age categories using H\_AGE. The date of birth, as reported during the Baseline interview, is recorded in DEMO (D\_DOB).

SURVIVE: This variable contains data from beneficiaries who were continuously enrolled in Medicare from January 1 up to and including their fall round interview.

D\_DOB: When the complete date of birth was entered (D\_DOB), the CAPI program automatically calculated the person's age, which was then verified with the respondent. In spite of this validation, the date of birth given by the respondent (D\_DOB) does not always agree with the date of birth per CMS records (H\_DOB). In these cases, the beneficiary was asked again, in the next interview, to provide a date of birth. Some recording errors have been identified this way, but in most cases beneficiaries provided the same date of birth both times they were asked. In some cases, proxies indicated that no one was exactly sure of the correct date of birth. In general, it is recommended that the variable (H\_DOB) be used for analyses, since the CMS date of birth was used to select and stratify the sample. (Initial interview variable)

H\_CENSUS: The Census division is preformed through internal edits, by matching the survey participant's SSA State code to the appropriate Census region. The Census divisions are as follows:

- New England – Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
- Middle Atlantic – New Jersey, New York, Pennsylvania

- South Atlantic – Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
- East North Central – Illinois, Indiana, Michigan, Ohio, Wisconsin
- West North Central – Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
- East South Central – Alabama, Kentucky, Mississippi, Tennessee
- West South Central – Arkansas, Louisiana, Oklahoma, Texas
- Mountain – Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
- Pacific – Alaska, California, Hawaii, Oregon, Washington
- Puerto Rico

D\_RACE2: Race categories are self-reported by the respondent. Categories are not suggested by the interviewer, nor did the interviewer try to explain or define any of the groups. Ethnic groups such as Irish or Cuban are not recorded. (Initial interview variable)

HISPORIG: Hispanic/Latino origin includes persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race. Again, these answers are self-reported by the respondent. (Initial interview variable)

INCOME: Income represents the best source or estimate of income during 2016. Data gathered in fall and summer interviews represent the most detailed 2016 data and are used when available. For individuals not completing the Fall 2016 interview (that is, Continuing Panel people unavailable for Fall 2016), the most recent information available was used. It should be noted that the variable INCOME includes income from all sources, such as pension, Social Security and retirement benefits, for the beneficiary and spouse. In some cases the respondent would not, or could not, provide specific information but did say the income was above or below \$25,000.

INT\_TYPE: Provides the source for a beneficiary's residence status at the time of interview, and the types of interviews conducted with C=Community, F=Facility, and B=Both.

INT\_TYPE is defined as:

- C = respondent only resided in the community and only completed Community-administered survey instruments in each round
- F = respondent only resided in a facility and only completed Facility-administered survey instruments in each round
- B = respondents completed instruments in both settings across the rounds

INT\_TYPE was created following the rules below:

- Beneficiaries were assigned an INT\_TYPE if they completed or partially completed an interview in at least one round in 2016. INT\_TYPE is also calculated for beneficiaries who completed an interview, but died or lost entitlement during the data year.
- Missing INT\_TYPES - There are currently 21 beneficiaries with "complete" dispositions which cannot have their INT\_TYPE/residence location calculated for them. These are individuals that appear to have died in early 2016, and did not have any completed/partially completed questionnaire data for 2016. These individuals have ever enrolled weights, but do not have completed interviews.

Note that in each data year, some differences by segment will exist (i.e., data may reflect a prior or future calendar year due to the specific questionnaire and reference period used to collect the information).

INT\_TYPE is only constructed using survey-reported data for the benefit year and is not edited to account for data collected in a future or prior data year.

INT\_TYPE is calculated on the benefit year, but data segments may reflect a prior or future calendar year due to the specific questionnaire and reference period used to collect the information. That is, the segment data is collected prior to or after the benefit year designation of INT\_TYPE.

For example, there may be Facility-dwelling beneficiaries (INT\_TYPE = F) that appear on the 2016 segments that include 2016 non-response adjustments: INCASSET, FOODINS, MCREPLNQ, RXPARTD, PNTACT. We would expect these segments to only include beneficiaries with INT\_TYPE = C or B because these segments contain data from survey-reported instruments only asked of beneficiaries that reside in the community. However, due to the fact that the data for these segments is collected in 2017, beneficiaries may have moved from a facility in 2016 to the community in 2017 at the time these data segments were collected.

Alternatively, data may be pulled forward from a prior data collection year. For example, a beneficiary in 2015 that answered affirmative to the question, "Have you ever had a hysterectomy?", a survey item that is asked of beneficiaries in the Community questionnaire, will have that answer pulled forward to the 2016 data segment even if the beneficiary currently resides in a facility in 2016, and thus they would show an INT\_TYPE = F. INT\_TYPE is only constructed using survey-reported data for the benefit year and is not edited to account for data collected in a future or prior data year.

PANEL: Indicates the beneficiary's first year in the MCBS.

SPCHNLNM: Respondents were asked to report all living children, whether stepchildren, natural or adopted children. (Initial interview variable)

SPMARSTA: The respondent was allowed to define marital status categories (SPMARSTA); there was no requirement for a legal arrangement (e.g., separated).

SPVARATE: The VA disability rating variable is a percentage and is expressed in multiples of ten; it refers to disabilities that are officially recognized by the government as service-related. If the VA finds that a Veteran has multiple disabilities, the VA uses a Combined Ratings Table to calculate a combined disability rating. Disability ratings are not additive, meaning that if a Veteran has one disability rated 60 percent and a second disability rated 20 percent, the combined rating is not 80 percent. This is because subsequent disability ratings are applied to an already disabled Veteran, so the 20 percent disability is applied to a Veteran who is already 60 percent disabled. For example, if a Veteran has a 50 percent disability and a 30 percent disability, the combined value will be found to be 65 percent, but the 65 percent must be converted to 70 percent (the nearest degree divisible by 10) to represent the final degree of disability. (Initial interview variable)

ADI: The Area Deprivation Index (ADI) is an indicator of the socioeconomic deprivation of geographic areas and is intended for use in evaluating the relationship between socioeconomic factors and health. This index was originally developed using 17 markers of socioeconomic status from the 1990 Census data and was last updated using the same indicators and 2000 census block group-level data. ADI values are set to have a mean of 100 and a standard deviation of 20. Higher ADI values indicate higher levels of deprivation. Negative ADI values exist but are uncommon.<sup>3</sup> There were three identified reasons for beneficiaries having a missing value for ADI: no address match, no zip+4 match, or no ADI value on the Census file. There was an 87.6 percent match rate.

IPR\_IND: The income-to-poverty ratio (IPR) was added in 2015. The Census Bureau determines who is poor by comparing an individual or household's income to a set of dollar-value thresholds that are intended to represent the amount of income needed to meet basic needs, and are adjusted for family size and composition. A family will be designated as "poor" or "not poor" depending on whether their income is at or

<sup>3</sup> HIPxCHANGE. Area Deprivation Index Datasets. <https://www.hipxchange.org/ADI>.

below or above this set threshold in a given year. In addition, the Census Bureau provides another way to describe a person's economic well-being by gauging how close to or far from the poverty threshold a family's income rests using an IPR. IPRs, e.g. income divided by the appropriate poverty threshold, are used to normalize incomes across family types and provide context for a better understanding of the depth of poverty (or lack thereof) of a family. The IPR is a useful analytic tool that can help MCBS users to easily identify the percentage of Medicare beneficiaries living in deep poverty, below poverty, or those in "near" poverty (usually defined as less than 125 percent of the poverty level); or how health care access and use may differ across different thresholds of interest. Note that the MCBS IPR is calculated only for household sizes of 1 (beneficiary living alone or in a facility) or 2 (beneficiary living with a spouse only) as the Income and Asset information is collected only from the beneficiary and the beneficiary's spouse. The MCBS IPR uses the Census Bureau weighted average poverty thresholds for calculation.

### *Special Notes*

The DEMO segment now contains all demographic data from both the survey and from CMS administrative records. A new LEP variable for 2016 indicates what language the respondent prefers to read in.

## **Dental Care Access (DENTAL)**

### *Core Content*

This segment asks respondents about access to dental care, and the reasons why they may not have had dental care.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

All variables in this section are derived by summarizing the data collected in each data collection round to produce information for the benefit year, and therefore all begin with the letter D.

## **Diabetes (DIABETES)**

### *Core Content*

This segment includes survey responses related to diabetes management. Only community-dwelling beneficiaries who indicated that they had ever been told they have non-gestational diabetes (variable D\_OCDTYP in the CHRNCND segment) are included in the DIABETES segment. Included are beneficiaries who indicated they had been diagnosed with any of these diabetic conditions: Type 1, Type 2, pre-diabetes/borderline diabetes, or other non-gestational type of diabetes. The variables in DIABETES originated as questions that were asked as part of the Health Status and Functioning Questionnaire (HFQ) only in even-numbered years.

### *Variable Definitions*

**FREQUENCY OF MANAGEMENT BEHAVIORS:** The DIABETES segment includes four pairs of items that describe the frequency of specific diabetes management behaviors. These behaviors are: taking insulin, taking prescription or oral diabetes medications, testing blood glucose, and checking for foot sores. The frequency of each behavior is described by a pair of variables, yielding the numeric frequency (variables D\_INSFRQ,

D\_MEDFRQ, D\_TSTFRQ, and D\_SORFRQ, respectively) and the corresponding frequency unit (variables INSUUNIT, MEDSUNIT, TESTUNIT, and SOREUNIT, respectively).

### *Special Notes*

Included in DIABETES are variables that are asked only in even-numbered years. Variables that are asked every year appear in other file segments. Three variables relevant to diabetes diagnosis (OCBETES, OCDTYPE, and OCDVISIT) appear in the CHRNCND segment. Five variables related to diabetes risk and screening (DIAEVERT, DIARECNT, DIAAWARE, DIARISK, and DIASIGNS) appear in the PREVCARE segment. The variable pertaining to diabetic retinopathy (ERETINOP) appears in the VISHEAR segment.

## Facility Assessments (FACASMNT)

### *Core Content*

CMS designed the Minimum Data Set (MDS) instrument to collect information regarding the health status and functional capabilities of nursing home residents. The MDS is administered to anyone residing in a certified nursing home, regardless of payer. As a large portion of our beneficiaries residing in a facility at the time of their interview live in nursing homes, we are often able to abstract information applicable to the MCBS directly from the MDS. For this reason, the MCBS facility questionnaire has been designed to mirror the MDS instrument.

### *Variable Definitions*

#### **Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL):**

ADLs and IADLs: We ask whether respondents have any difficulty performing several activities. Their answers about difficulty performing the ADLs (PFBATHNG, PFDRSSNG, PFEATING, PFTRNSFR, PFLOCOMO, and PFTOILET) and IADLs (DIFUSEPH, DIFSHOP, and DIFMONEY) reflect whether or not the beneficiary usually had difficulty and anticipates continued trouble with these tasks, even if a short-term injury made them temporarily difficult. Note that in addition to the three IADLs above that are common to both the Community and Facility interviews, the Facility MDS evaluates five more IADLs (IADSTOOP, IADLIFT, IADREACH, IADGRASP, and IADWALK).

“Difficulty” in these questions has a qualified meaning. Only difficulties associated with a health or physical problem were considered. If a respondent only performed an activity with help from another person (including just needing to have the other person present while performing the activity), or did not perform the activity at all, then that person was deemed to have difficulty with the activity.

Help from another person includes a range of helping behaviors. The concept encompasses personal assistance in physically doing the activity, instruction, supervision, and “standby” help. These questions were asked in the present tense; the difficulty may have been temporary or may be chronic. Vague or ambiguous answers, such as “sometimes I have difficulty”, were coded “yes.”

DIFMONEY: Managing money refers to the overall complex process of paying bills, handling simple cash transactions, and generally keeping track of money coming in and money going out. It does not include managing investments, preparing tax forms, or handling other financial activities for which members of the general population often seek professional advice.

DIFSHOP: Shopping for personal items means going to the store, selecting the items and getting them home. Having someone accompany the respondent would qualify as help from another person.

DIFUSEPH: Using the telephone includes the overall complex behavior of obtaining a phone number, dialing the number, talking and listening, and answering the telephone.

PFBATHNG: Those who have difficulty bathing or showering without help met at least one of the following criteria:

- someone else washes at least one part of the body
- someone else helps the person get in or out of the tub or shower, or helps get water for a sponge bath
- someone else gives verbal instruction, supervision, or stand-by help
- the person uses special equipment such as hand rails or a seat in the shower stall
- the person never bathes at all (a highly unlikely possibility)
- the person receives no help, uses no special equipment or aids, but acknowledges having difficulty

PFDRSSNG: Dressing is the overall complex behavior of getting clothes from closets and drawers and then putting the clothes on. Tying shoelaces is not considered part of dressing, as is putting on socks or hose. Special dressing equipment includes items such as button hooks, zipper pulls, long-handled shoe horns, tools for reaching, and any clothing made especially for accommodating a person's limitations in dressing, such as Velcro fasteners or snaps.

PFEATING: A person eats without help if he or she can get food from the plate into the mouth. A person who does not ingest food by mouth (that is, is fed by tube or intravenously) is not considered to eat at all. Special eating equipment includes such items as a special spoon that guides food into the mouth, a forked knife, a plate guard, or a hand splint.

PFLOCOMO: Walking means using one's legs for locomotion without the help of another person or special equipment or aids such as a cane, walker or crutches. Leaning on another person, having someone stand nearby in case help is needed and using walls or furniture for support all count as receiving help. Orthopedic shoes and braces are special equipment.

PFTOILET: Using the toilet is the overall complex behavior of going to the bathroom for bowel and bladder function, transferring on and off the toilet, cleaning after elimination, and arranging clothes. Elimination itself, and consequently incontinence, are not included in this activity, but were asked as a separate question, discussed next.

PFTRNSFR: Getting in and out of chairs includes getting into and out of wheelchairs. If the beneficiary holds onto walls or furniture for support, he or she is considered to receive "help from special equipment or aids", since the general population does not use such objects in getting in and out of chairs. Special equipment includes mechanical lift chairs and railings.

### *Special Notes*

#### **What is the difference between the MDS and FACASMNT data?**

See exhibit below for key differences between the segment sources, population, reference period and unit of observation.

**Exhibit 3.2.1:** Differences between FACASMNT and MDS3 Data

| <b>Data Type</b>           | <b>Facility Assessment (FACASMNT)</b>  | <b>Minimum Data Set (MDS3)</b>   |
|----------------------------|--|--|
| <b>Source</b>              | Survey-reported (facility staff may pull information from electronic health records or systems to answer the survey questions) | Administrative (like claims files)   |
| <b>Population</b>          | Represents ALL facility residents, not just those in nursing homes   | Represents all <b>residents of nursing homes certified to participate in Medicare or Medicaid ONLY</b>           |
| <b>Reference period</b>    | Throughout the year  | Could be multiple assessments during the year, time periods may differ based on what happened to each individual |
| <b>Unit of observation</b> | One per beneficiary  | One per beneficiary per assessment   |

**Facility Characteristics (FACCHAR)***Core Content*

The Facility Characteristics segment is constructed using data from the Facility questionnaire, which provides information about survey collected facility stays, and the administrative Provider of Service (POS) file, which provides facility characteristics pertaining to SNF stays.

For a beneficiary in the current year's population file, any facility stay within a round from the current file year, as well as from the following winter round, provided that it has an admission date that falls within the current file year, is included in the file. The inclusion of these winter round records is meant to capture any stays which began after the conclusion of the fall round for a given file year. Selected data from the POS file is also included for any SNF stay occurring during the file year for beneficiaries on the finder file.

*Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

*Special Notes*

Variables listed in Exhibit 3.2 have been renamed from previous releases to reflect how the data are collected currently and from the administrative sources.

**Exhibit 3.2.2:** Facility Characteristics' Renamed Variables

| 2015 Var Name | Description                    | Formerly |
|---------------|--------------------------------|----------|
| ELIGSTAT      | Provide long term care?        | FACLONGT |
| CANDCBED      | # of Mcare & Mcaid cert beds   | MANDMBED |
| CAIDBEDS      | # of Mcaid only cert beds      | MCAIDBED |
| CAREBEDS      | # of Mcare only cert beds      | MCAREBED |
| FMRBEDS       | # of ICF/MR beds               | ICFMRBED |
| D_UNCBED      | # of uncertified beds          | CERTBEDS |
| HDLICBED      | # of licensed (not cert) beds  | MNORMBED |
| PCHBED        | # of other long term care beds | OTLTCBED |
| OTHERBED      | # of LTC beds w cert unknown   | NLTCBEDS |
| NORMCARE      | Provide nursing/medical care?  | ROOMCARE |
| SUPRMEDI      | Supervises self-admin meds?    | SUPRVMED |
| HELPBATH      | Provide help w/bathing?        | FHLPBATH |
| HELPDRES      | Provide help w/dressing?       | FHLPDRES |
| HELPSHOP      | Provide help w/ shopping?      | FHLPSHOP |
| HELPWALK      | Provide help w/walking?        | FHLPWALK |
| HELPEAT       | Provide help w/eating?         | FHLPEAT  |
| HELPCOMM      | Provide help w/communication?  | FHLPCOMM |
| D_24CARE      | Provide 24 hr on-site care?    | FHLPNURS |
| D_HIGHRT      | High monthly facility rate     | HIRATE   |
| D_LOWRT       | Low monthly facility rate      | LOWRATE  |
| RECADMN       | Most recent admission date     | ADMIN    |
| BEFORADM      | Place admitted from            | ADMTFROM |
| D_LIVWITH     | Lived with prior to admission  | LIVWRELA |

**Falls (FALLS)***Core Content*

This file contains responses related to injuries and attitudes related to falls. The data included in this segment are collected from topical sections asked in 2015 and every year thereafter.

*Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

*Special Notes*

Fallhurt was not in the 2015 data file, but is in the 2016 data.

## Food Insecurity (FOODINS)

### *Core Content*

This file contains information regarding the beneficiary's availability to obtain sufficient food. These questions are part of the Income and Assets Questionnaire and are based upon the USDA ERS Six-Item Short Form of the Food Security Survey Module found at <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools>.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

This questionnaire is administered the summer following the year of interest. The food insecurity section for the reference year 2016 was asked in the summer of 2017. Special non-response adjustment weights are included in the file to account for survey non-response from the fall to the summer data collection period. Please see the Weights section below for information on using weights with data from Topical Questionnaires.

## General Health (GENHLTH)

### *Core Content*

This file contains data regarding a beneficiary's general health status and functioning such as height and weight.

### *Variable Definitions*

HEIGHTFT and HEIGHTIN: For height and weight, the respondent was asked to recall or estimate, not to measure or weigh him or herself. In the height measurement, fractions of an inch have been rounded: those one-half inch or more were rounded up to the next whole inch, those less than one-half inch were rounded down. (Initial interview variable)

HELMTACT: Limitations on activities and social life reflect the respondent's experience over the preceding month, even if that experience was atypical.

WEIGHT: In the weight measurement, fractions of a pound have been rounded; those one-half pound or more were rounded up to the next whole pound; those less than one-half pound, were rounded down. (Initial interview variable)

BMI\_CAT: BMI (Body Mass Index) was calculated using height and weight as-  
 $(\text{WEIGHT} * 703) / ((\text{HEIGHTFT} * 12 + \text{HEIGHTIN}) * (\text{HEIGHTFT} * 12 + \text{HEIGHTIN}))$

Then categorized as:

- 0 < BMI < 18.5 = 1
- 18.5 ≤ BMI < 25 = 2
- 25 ≤ BMI < 30 = 3
- 30 ≤ BMI < 40 = 4
- BMI ≥ 40 = 5

## Special Notes

N/A

## Health Insurance Summary (HISUMRY)

### Core Content

The Health Insurance Summary file contains information on the characteristics of insurance coverage as well as information regarding premiums, co-pays, deductibles, and capitated payments. Note: To limit the size of HISUMRY, only five private health insurance policies are detailed. For individuals in the sample that had more than five private health insurance policies, the total in the summary indicator is correct, but the number of plans detailed is less than the total. HISUMRY contains all administrative and survey reported insurance detail data.

### Variable Definitions

Please find below descriptions and definitions for several key variables found on the HISUMRY segment.

H\_CPBP01-12: Part C Plan Benefit Package identifiers

H\_CPRM01-12: Part C Premium values

H\_CREDSW: Creditable Coverage indicators

H\_DDED01-12: Part D Deductible values

H\_DPBP01-12: Part D Plan Benefit Package identifiers

H\_DPRM01-12: Part D Premium values

H\_DSGM01-12: Part D Segment identifiers

H\_DUAL01 – 12: The variables H\_DUAL01 – H\_DUAL12 describe dual eligibility for each month, based on state reporting requirements outlined in the MMA. These variables provide more detail regarding the type of Medicaid benefits the beneficiary is entitled to receive and are considered the most accurate source of information on enrollee status. Specific types of dual eligibility identified by these variables are as follows, where the applicable month is MM:

- Qualified Medicare Beneficiaries without other Medicaid (QMB-only) – These individuals are entitled to Medicare Part A, have an income of 100 percent of the Federal poverty level (FPL) or less, have resources that do not exceed twice the limit for SSI eligibility, and are not otherwise eligible for full Medicaid. Medicaid pays their Medicare Part A premiums, if any, Medicare Part B premiums, and to the extent consistent with the Medicaid State plan, Medicare deductibles and coinsurance for Medicare services provided by Medicare providers. [Partial benefit; H\_DUAL\_MM=01]
- Qualified Medicare Beneficiaries plus full Medicaid (QMB-Plus) – These individuals are entitled to Medicare Part A, have an income of 100 percent FPL or less and resources that do not exceed twice the limit for SSI eligibility, and are eligible for full Medicaid benefits. Medicaid pays their Medicare Part A premiums, if any, Medicare Part B premiums, and, to the extent consistent with the Medicaid State plan, Medicare deductibles and coinsurance, and provides full Medicaid benefits. [Full benefit; H\_DUAL\_MM=02]
- Specified Low-Income Medicare Beneficiaries without other Medicaid (SLMB-only) – These individuals are entitled to Medicare Part A, have an income of greater than 100 percent FPL but less than 120 percent

- FPL, have resources that do not exceed twice the limit for SSI eligibility, and are not otherwise eligible for Medicaid. Medicaid pays their Medicare Part B premiums only. [Partial benefit; DUAL\_MM=03]
- Specified Low-Income Medicare Beneficiaries plus full Medicaid (SLMB-plus) – These individuals are entitled to Medicare Part A, have an income of greater than 100 percent FPL but less than 120 percent FPL, have resources that do not exceed twice the limit for SSI eligibility, and are eligible for full Medicaid benefits. Medicaid pays their Medicare Part B premiums and provides full Medicaid benefits. [Full benefit; DUAL\_MM=04]
- Qualified Disabled and Working Individuals (QDWI) – These individuals lost their Medicare Part A benefits due to their return to work. They are eligible to purchase Medicare Part A benefits, have an income of 200 percent FPL or less, have resources that do not exceed twice the limit for SSI eligibility, and are not otherwise eligible for Medicaid. Medicaid pays the Medicare Part A premiums only. [Partial benefit; DUAL\_MM=05]
- Qualifying Individuals (QI) – There is an annual cap on the amount of money available, which may limit the number of individuals in the group. These individuals are entitled to Medicare Part A, have an income of at least 120 percent FPL but less than 135 percent FPL, have resources that do not exceed twice the limit for SSI eligibility, and are not otherwise eligible for Medicaid. Medicaid pays their Medicare Part B premiums only. [Partial benefit; DUAL\_MM=06]
- Other full benefit dual eligible/Medicaid Only Dual Eligibles (Non-QMB, -SLMB, -QDWI, -QI) – These individuals are entitled to Medicare Part A and/or Part B and are eligible for full Medicaid benefits. They are not eligible for Medicaid as a QMB, SLMB, QDWI, or QI. Medicaid provides full Medicaid benefits and pays for Medicaid services provided by Medicaid providers, but Medicaid will only pay for services also covered by Medicare if the Medicaid payment rate is higher than the amount paid by Medicare, and, within this limit, will only pay to the extent necessary to pay the beneficiary's Medicare cost sharing liability. Payment by Medicaid of Medicare Part B premiums is a state option. [Full benefit; DUAL\_MM=08]

H\_DOE: Medicare coverage start date from the Master Beneficiary Summary file.

H\_DOT: Medicare entitlement end date, from the Medicare Administrative data. If the date is beyond the calendar year, it is shown as missing.

H\_ESRBEG: Beginning date of ESRD period

H\_ESREND: Ending date of ESRD period

H\_GHPSW: Some of the beneficiaries in the MCBS sample belong to Medicare managed care plans. CMS derived variables that describe this Medicare managed care membership (H\_GHPSW and MAFF01 – MAFF12). The variable (H\_GHPSW) should be used only when there is an indication that the enrollee was a member of a Medicare managed care plan at some time during 2016 and this information is needed for analysis. The monthly variables (H\_MAFF01-H\_MAFF12) can be used for analyzing membership at specific points in time. The variables will indicate either "FF" (Original Medicare/Fee for Service), "MA" (Medicare Advantage/Other Medicare Capitated Payment Plans), or "No" (No Entitlement). The H\_GHPSW variable is derived from the Health Maintenance Organization (HMO) Coverage Months variable in the administrative data. This variable indicates participation in a group health organization, also known as HMO, managed-care participation, or Medicare Advantage/Medicare Part C.

H\_MACY01-12: Buy-in agency (state agency code)

H\_MAFF01-12: The MAFLAG variables are the most reliable indicators for monthly MA information, as of the 2009 MCBS files. This information is sourced from the CMS administrative data. The H\_ENT variables were used to determine if the individual did not have Medicare entitlement. This information factored into the "No Entitlement" category in the MAFLAG monthly variables. The monthly entitlement variables can be found on the HITLINE segment. H\_DOE and H\_DOT on the HISUMRY file provide Medicare entitlement start and end

dates for the beneficiary. Because the administrative source of this information has changed, H\_ENT variables cannot be used to “crosswalk” to the MAFLAG variables. However, H\_ENT can be used to determine Part A and Part B eligibility among FFS beneficiaries in files prior to 2015.

H\_MAPMT: Total MA A/B Payment – annual amount, from the MARX data

H\_MCDE01-12: Medicaid eligibility status

H\_MCSW: State buy-in is tracked by CMS and is used as a general proxy for Medicaid participation. CMS derived H\_MCSW using its administrative enrollment data.

H\_MEDSTA: Medicare status code as of 12/31 (Aged/Disabled/ESRD)

H\_OPMDCD:

This variable provides a summary of annual Medicare-Medicaid dual eligibility, based on the state Medicare Modernization Act (MMA) files. In 2015, CMS modified the data types of several variables. One example is the 2013 variable OP\_MD CD compared to the 2015 variable H\_OPMDCD. The variable values “1”, “2”, “3”, “4” had been stored as character values. As part of the modifications applied in 2015, these values are stored as numeric values. The code definitions are equivalent. Users that want to merge the HISUMRY segment across Access to Care (2013 and prior) and Survey File (2015 and later) must change the data type of one variable and rename it.

Beneficiaries are assigned a dually eligible status if they are Medicaid eligible for at least one month. Specific eligibility (full, partial, or QMB) is determined by the beneficiary’s status in the last month of eligibility for the year (for definitions, see option C below in Special Notes for HISUMRY for Full-benefit vs. Partial-benefit vs. QMB-only). QMB beneficiaries include Qualified Medicare Beneficiaries without other Medicaid (QMB-only). The “partial benefit” beneficiaries include: Specified Low-Income Medicare Beneficiaries without other Medicaid (SLMB-only), Qualified Disabled and Working Individuals (QDWI), and Qualifying Individuals (QI). The “full benefit” beneficiaries include: Qualified Medicare Beneficiaries plus full Medicaid (QMB-Plus), Specified Low-Income Medicare Beneficiaries (SLMB-Plus), and all other full benefit beneficiaries (Non-QMB, -SLMB, -QDWI, -QI).

Medicaid Questions: To help the respondent answer the questions about Medicaid, the interviewers used the name of the Medicaid program in the state where the beneficiary was living. A health insurance plan is one that covers any part of hospital bills, doctor bills, or surgeon bills, but does not include any of the following:

- Public plans, including Medicare and Medicaid, mentioned elsewhere in the questionnaire.
- Disability insurance which pays only on the basis of the number of days missed from work.
- Veterans’ benefits.
- “Income maintenance” insurance which pays a fixed amount of money to persons both in and out of the hospital or “Extra Cash” policies. These plans pay a specified amount of cash for each day or week that a person is hospitalized, and the cash payment is not related in any way to the person’s hospital or medical bills.
- Workers’ Compensation.
- Any insurance plans that are specifically for contact lenses or glasses only. Any insurance plans or maintenance plans for hearing aids only.
- Army Health Plan and plans with similar names (e.g., CHAMPUS, CHAMPVA, Air Force Health Plan).
- Dread disease plans that are limited to certain illnesses or diseases such as cancer, stroke or heart attacks.

- Policies that cover students only during the hours they are in school, such as accident plans offered in elementary or secondary schools.
- Care received through research programs such as the National Institutes of Health.

H\_PDLS01-12: Low-Income Subsidy Indicator values

H\_PDPY01-12: Part D Capitation Payments

H\_PDRS01-12: Retiree Drug Subsidy monthly indicators for whether or not the employer provided subsidies for the beneficiary.

H\_PLPY01-12: Medicare Capitation Payments

H\_PRPY01-04: Primary Payer codes. Blank if Medicare is primary, other values indicate additional payer categories.

H\_PRTC01-12: Part C Contract identifiers

H\_PRTD01-12: Part D Contract identifiers

H\_PTAPRM: Total Part A Premium paid in CY

H\_PTBRPM: Total Part B Premium paid in CY

H\_PTDAMT: PTD Total Payment – annual amount, from the MARX data

MTFCOVER: Indicates whether the SP received health care from a Military Treatment Facility.

S\_ANAMT1 – 5: The annual cost of private health insurance plan premiums. A premium amount was recorded even if the respondent did not directly pay the premium (if, for example, a son or daughter paid the premium). Premium amounts have been annualized based on the assumption that the beneficiary held the policy for the entire 12-month period. This variable was derived using responses from (HI22h), (HI33) and (HIS33).

S\_COVNH1 – 5: Indicates whether the private plan has long-term care coverage. This information is obtained from either: (HI22f), (HI31), or (HIS31).

S\_COVNM1 – 5: Is the number of people covered by each private plan. This information is obtained from either: (HI22d), (HI29) or (HIS29).

S\_DNTAL1 – 5: Indicates whether the plan covers dental services.

S\_HMOPL1 – 5: Indicates whether the plan is an HMO.

S\_INS1 – 5: Specifies whether the private health insurance plan has limited service coverage such as dental-only, prescription drug-only, etc. This information was developed through an editing process in which the plan names were researched and categorized into comprehensive insurance or single-service insurance plans. Furthermore, D\_RX1 – 5 was developed in conjunction with that editing process.

S\_IP1 – 5: Indicates whether the plan covers Inpatient Stays.

S\_OBTNP1 – 5: How did the main insured person get the policy (e.g. self-purchased, employer, etc.)? Obtained from either (HI22b), (HI27), or (HIS27).

S\_PAYSP1 – 5: Does the main insured person (MIP) pay any part of the insurance premium? Obtained from either (HI22g), (HI32), or (HIS32).

S\_PHREL1 – 5: What is the relationship of the policyholder to the beneficiary? The “Policy Holder” or “Main insured person (MIP)” is the member of the group/union or the employee of the company that provides the insurance plans. It would also be the name on the policy, if the beneficiary had it available. Responses from (HIS26), (HI22a), or (HI26) are coupled with roster information which contains these relationships to determine the policyholder’s relationship to the beneficiary.

S\_RX1 – 5: Indicates if the private health insurance plan covers prescription drugs or is a prescription drug discount card. For example, a respondent may indicate that a plan covers drugs. If further analysis reveals that the plan is a single-service type, D\_RX1 – 5 would indicate no drug coverage in order to prevent drug imputation for all services. These flags were developed specifically to aid in accurately setting prescription drug imputation flags.

S\_TRI1 – 5: Is the plan type TRICARE? These variables will have a value of either 1 “Yes” or Inapplicable/Missing.

S\_TRIRX1 – 5: Specifies where Tricare Members obtain prescription drugs.

S\_TYPPL1 – 5: Plans are identified as Medicare Advantage (Part C), Medicaid, Other Public Plan, Veteran Affairs Plan, Employer-Sponsored Insurance, Retiree Drug Subsidy Plan, Self-Purchased Private Plan, Self-Purchased Specialty Plan, Other Insurance Plan Type Unknown, or Self-Purchased Private Managed Care Plan. Note that private insurance plan information collected in a facility is categorized as “unknown” as we do not ask the facility representative the source of the beneficiary’s private health insurance.

TOT\_PREM: Beginning with 2015, TOT\_PREM is the sum of all premiums paid, PARTS A, B, C, and D (where applicable) and all survey reported private insurance premiums. Premiums paid are prorated by the number of months of coverage.

### *Special Notes*

When describing dual enrollees, users typically define and present analyses separately for two subgroups: full-benefit and partial-benefit. However, some users may wish to pull the QMB-only beneficiaries out of the partial-benefit group to create a third classification. Therefore, the H\_DUAL01 – H\_DUAL12 variables may be used to group Medicare-Medicaid enrollees into one, two or three categories, as follows:

A. No delineation:

All Medicare-Medicaid (dual) enrollees: H\_DUAL01 – H\_DUAL12 in (1, 2, 3, 4, 5, 6, 8)

B. Full-benefit vs. Partial-benefit:

Partial-benefit: H\_DUAL01 – H\_DUAL12 in (1, 3, 5, 6)

Full-benefit: H\_DUAL01 – H\_DUAL12 in (2, 4, 8)

C. Full-benefit vs. Partial-benefit vs. QMB-only:

QMB-only: H\_DUAL01 – H\_DUAL12 = 1

Partial-benefit (non-QMB): H\_DUAL01 – H\_DUAL12 in (3, 5, 6)

Full-benefit: H\_DUAL01 – H\_DUAL12 in (2, 4, 8)

The plan type variables have been replaced by the H\_MAFF monthly variables referenced above. The Part D Plan Type variables have also been dropped and replaced by monthly Part D contract identifiers (H\_PRTD01– H\_PRTD12).

Part C (H\_CPRM01–H\_CPRM12) and Part D (H\_DPRM01–H\_DPRM12) premiums have been added to HISUMRY. Creditable coverage data is no longer available.

PU\_RX, PU\_INS, and PUBRXCOV can be derived from the information contained on this file, but are not included as separate variables in the data release.

Some variables that ask about private health insurance plans were not captured in the survey-reported data in 2016. Specifically, several variables that ask about private health insurance plans were not correctly copied to the PLAN loop by the questionnaire. There were 166 beneficiaries showing invalid skips. Variables that asked about coverage begin dates for Medicaid plans were also not correctly copied to the PLAN loop by the questionnaire in some instances. There were 176 beneficiaries showing invalid skips. The affected variables are as follows: S\_OBTNPx, S\_COVNMx, S\_IPx, S\_COVNHx, TOT\_PREM, S\_PAYSPx and possibly some coverage dates in HISUMRY and HITLINE.

S\_DNTALx indicates whether the beneficiary has dental coverage through an HMO. A questionnaire issue caused many responses to this item in 2016 to appear as null values, regardless of the response provided during the interview. This affected data for approximately 3,423 beneficiaries.

## Health Insurance Timeline (HITLINE)

### *Core Content*

This segment contains the types of insurances, the coverage eligibility timeline, and the source information for the coverage. HITLINE contains one record for each plan type a beneficiary has, and then provides information on the monthly eligibility/enrollment and the source of that data. The segment also includes information on Part D coverage. PLANTYPE = 4 is Medicare Part D/Part D/MAPD.

### *Variable Definitions*

PLANTYPE: Indicates the type of plan or plan description.

BEGDATE: The date the plan coverage began.

ENDDATE: The date the plan coverage ended

SCRCCOV01-12: Indicates the source of coverage information for the plan: CMS Administrative Data, Survey Data, or Both Administrative and Survey Data.

COV01-12: Indicates if the beneficiary was covered by this plan for a given month in the calendar year.

### *Special Notes*

The HITLINE segment has one record for every plan reported for a beneficiary. Individuals covered for the entire year by a plan will have a BEGDATE of 0101201X and an ENDDATE of 1231201X to indicate a full year's coverage.

The variables D\_PRIVAT, D\_HMO\_COV, D\_HMOCUR, D\_MCAID, D\_MCARE, and D\_MCRHMO are not on this file, however the information regarding Medicare Advantage coverage, Medicaid coverage, Medicare coverage and the sources of the coverage information is contained within the file.

Starting with data year 2015, the HITLINE segment is provided in a long format versus a wide format. If data users are conducting analyses across multiple years, data should be transposed in order to merge them.

This segment contains the types of insurances, the coverage eligibility timeline, and the source information for the coverage. HITLINE contains one record for each plan type a beneficiary has, and then provides information on the monthly eligibility/enrollment and the source of that data. The segment also includes information on Part D coverage. PLANTYPE = 4 is Medicare Part D/Part D/MAPD.

## Household Characteristics (HHCHAR)

### *Core Content*

This file includes information about the beneficiary's household composition and information about the beneficiary's residence. It reflects the size of the household, and the age and relationship of the people in it. Information about the beneficiary's physical residence is collected at the Baseline interview and updated as needed. Information about the other individuals residing with the beneficiary is updated as necessary.

### *Variable Definitions*

CMS defines a household as a group of individuals, either related or not, who live together and share one kitchen. This may be one person living alone, a head of household and relatives only, or a head of household living with relatives, boarders and any other unrelated individual living under the same roof, sharing the same kitchen.

Household membership includes all persons who currently live at the household or who normally live there but are away temporarily. For example, unmarried students away at school or family members away receiving medical care are included. Visitors in the household who will be returning to a different home at the end of the visit are not included. Generally, if there is any question about the composition of the household, the respondent's response is accepted.

Because the date of birth or exact relationship of a household member was sometimes unknown (perhaps because a proxy provided the information), the sum of the variables "number related"/"number not related" (D\_HHREL/D\_HHUNRL) or "number under 50"/"number 50 or older" (D\_HHLT50/D\_HHGE50) may not equal the total number of people in the household (D\_HHTOT).

### *Special Notes*

Information about whether the beneficiary has a residence in another state is no longer included in the file.

## Income and Assets (INCASSET)

### *Core Content*

This segment contains data on a beneficiary's reported income and assets

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

The IA Supplement was conducted in the Summer 2017 interview period following the year of interest. The IA questions for the reference year 2016 were asked in the summer of 2017. Special non-response adjustment weights are included in the file to account for survey non-response from the fall to the summer data collection

period. Note that counts of cases with positive topical module weights may vary within the data year and may change across years due to response rates, sample sizes, and fielding methods. The topical weights account for these changes. Please see the Weights section below for information on using weights with data from Topical Questionnaires.

We imputed income in 2016 when income data are missing. We first imputed whether or not an income source (such as Social Security) existed. If the income source exists, then the amount earned was imputed next. Imputation was performed using the hot deck imputation method, and a flag was created for each imputed variable indicating whether or not the corresponding value was imputed.

## Interview Characteristics (INTERV)

### *Core Content*

This segment summarizes the characteristics of the interview such as the type of interview conducted and whether or not a proxy was used.

### *Variable Definitions*

INTERVU: There is one record for each individual for each round of completed interviews, either in the community (INTERVU = "C") or a facility (INTERVU = "F"). Some beneficiaries had more than one interview in a round. To avoid duplication of data, the information in this file represents the last interview conducted with the respondent in each given round. INTERVU indicates which type of interview was conducted.

INTVDISP: the respondent's status as of the last day of the calendar year. There are two dispositions (40 = complete and 50 = complete-deceased). This variable was called STATUS in the 2013 CAU LDS release.

### **Proxy Rules:**

WHYPROXY: WHYPROXY indicates the reason that a proxy was needed.

WHYPROXY code of 05: "Proxy needed – language problem" was given as a reason for the use of a proxy in approximately 5 percent of the cases. More often, language problems were addressed without the use of a proxy. Interpreters were used in some cases, and bilingual interviewers used Spanish-language versions of the questionnaires when the respondent preferred to be interviewed in Spanish. There are both English and Spanish versions of the CAPI survey instrument; the variable INTLANG indicates which version was used.

Proxy respondents were always used in nursing homes, homes for beneficiaries with intellectual disabilities, and psychiatric hospitals. The need for a proxy when interviewing respondents in other institutions was evaluated on a case-by-case basis.

In long-term care facilities, the proxy respondents were members of the staff at the facility identified by the administrator. Usually, more than one respondent was used; for example, a nurse may have answered the questions about health status and functioning, while someone in the business office handled questions about financial arrangements.

SPPROXY: People who were too ill or who could not complete the Community interview for other reasons were asked to designate a proxy. A proxy is someone very knowledgeable about the beneficiary's health and living habits. In many cases, the proxy was a close relative such as the spouse, a son, or daughter. In other cases, the proxy was a non-relative like a close friend or caregiver. The variable SPPROXY indicates whether or not a Community interview was conducted with a proxy respondent.

**Other variables:**

INTVDATE: Date on which the interview was conducted.

MINTOTAL: MINTOTAL contains the length of the interview, in minutes. A new timestamp was implemented in 2016 that captures actual questionnaire administration time only while excluding any time that elapses for setting up the interview.

TOTLINTV: Indicates the total number of interviews conducted with this beneficiary. Community interviews are sometimes interrupted to accommodate the respondent's schedule or for other reasons. Facility interviews are conducted with several instruments and often involve many respondents.

*Special Notes*

N/A

**Medicare Advantage Questions (MAPLANQX)***Core Content*

The Medicare Advantage (MA) Questions segment augments information from the Access to Care and Satisfaction with Care sections of the questionnaire for those beneficiaries enrolled in Medicare Part C. Beneficiaries who are enrolled in a Medicare Advantage plan at the time of the interview are asked general questions about their health plans, which include access to and satisfaction with medical services. The file also contains the beneficiary's assessment of the quality of the medical care that they are receiving, types of additional coverage offered, and any beneficiary-paid premiums associated with the health plan.

*Variable Definitions*

D\_ANHMO: What is the annual additional cost of Medicare Advantage premiums? The premiums have been annualized regardless of the length of time the respondent actively held the policy. This variable is derived from Health Insurance Summary Questionnaire (HIS) item HISMC10.

*Special Notes*

N/A

**Medicare Plan Beneficiary Knowledge (MCREPLNQ)***Core Content*

This segment contains information about the beneficiary's knowledge with the Medicare open enrollment period and knowledge about Medicare covered expenses.

The data collected in this segment will allow an evaluation of the impact of existing education initiatives by CMS. The KNQ questionnaire section helps to refine future CMS education initiatives by asking about information that beneficiaries may need, preferred sources for this information, and beneficiaries' access to insurance information. This data also presents the knowledge beneficiaries have gained from CMS publications.

*Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

## *Special Notes*

This questionnaire is administered the winter following the year of interest. The KNQ questions for the reference year 2016 were asked in the winter of 2017. Special non-response adjustment weights are included in the file to account for survey non-response from the fall to the winter data collection period. Note that counts of cases with positive topical module weights may vary within the data year and may change across years due to response rates, sample sizes, and fielding methods. The topical weights account for these changes. Please see the Weights section below for information on using weights with data from Topical Questionnaires.

## **Mental Health (MENTHLTH)**

### *Core Content*

This segment contains survey responses regarding the beneficiary's mental health such as feelings of anxiety or depression.

### *Variable Definitions*

Generalized Anxiety Disorder scale (GAD-2): Two items labeled with "GAD" comprise the GAD-2 scale, which is a screening tool for generalized anxiety.

Patient Health Questionnaire (PHQ-9): Items labeled with "PHQ" are taken from the PHQ-9, which is a screening tool for depression. The MCBS does not collect the ninth item on the PHQ-9, which asks about suicidal ideation, but does include the PHQ-9 follow-up question that asks about the overall difficulty caused by depression (MENTHLTH item PHQPRDIF).

### *Special Notes*

N/A

## **Mobility (MOBILITY)**

### *Core Content*

This segment contains information on the beneficiary's use of available transportation options and whether the beneficiary's health affects their daily travel.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

All variables in this section are derived by summarizing the data collected in each data collection round to produce information for the benefit year, and therefore all begin with the letter D.

## Minimum Data Set (MDS3)

### *Core Content*

The Minimum Data Set is assessment information conducted while the beneficiary was in an approved Medicare Facility.

CMS designed the Minimum Data Set (MDS3) instrument to collect information regarding the health status and functional capabilities of nursing home residents. The MDS is administered to anyone residing in a certified nursing home, regardless of payer. For this reason, the MCBS facility questionnaire has been designed to mirror the MDS instrument. By adapting the applicable MCBS questions, interviewers can extract data directly from these assessments which expedites collection, while ensuring quality.

For more information regarding the MDS and the changes in version 3.0, please consult <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/index.html>.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

MDS3 records are included for a beneficiary having such a record in the year of interest.

What is the difference between the MDS and FACASMNT data? See [Facility Assessments](#) (FACASMNT) section above.

There are Community-dwelling beneficiaries (DEMO segment INT\_TYPE = C) that appear in the MDS segment. CMS includes MDS data for all MCBS beneficiaries regardless of the INT\_TYPE, which is determined by the type of survey instrument completed.

## NAGI Disability (NAGIDIS)

### *Core Content*

This segment contains information on difficulties with the beneficiary's performance of activities of daily living. The types of ADLs and IADLs the beneficiary has difficulty performing, how long the beneficiary has experienced these difficulties, whether or not the beneficiary has received any help or used supportive equipment to perform ADLs or IADLs, and the total number of helpers are all contained in this file. Note: For beneficiaries with identified helpers, information about the persons responsible for assisting with the beneficiary's performance of ADLs is found in the ASSIST segment.

### *Variable Definitions*

#### **Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL):**

ADL and IADL Measures: We ask respondents whether they have any difficulty performing 12 activities. Their answers about difficulty performing the IADLs (PRBTELE, PRBLHWK, PRBHWWK, PRBMEAL, PRBSHOP, and PRBBILS) and ADLs (HPPDBATH, HPPDDRES, HPPDEAT, HPPDCHAR, HPPDWALK, HPPDPTOIL) reflect whether

or not the beneficiary usually had difficulty and anticipates continued trouble with these tasks, even if a short-term injury made them temporarily difficult.

"Difficulty" in these questions has a qualified meaning. Only difficulties associated with a health or physical problem were considered. If a beneficiary only performed an activity with help from another person (including just needing to have the other person present while performing the activity) then that person was deemed to have difficulty with the activity.

Help from another person includes a range of helping behaviors. The concept encompasses personal assistance in physically doing the activity, instruction, supervision, and "standby" help. These questions were asked in the present tense; the difficulty may have been temporary or may be chronic. Vague or ambiguous answers, such as "Sometimes I have difficulty", were coded "yes."

D\_ADLHNM: CMS derives the number of persons helping with ADLs and/or IADLs from the Health Status and Functioning Questionnaire (HFQ) items HFKA-F and HFLA3-F3.

HPPDBATH: Those who have difficulty bathing or showering without help met at least one of the following criteria:

- someone else washes at least one part of the body
- someone else helps the person get in or out of the tub or shower, or helps get water for a sponge bath
- someone else gives verbal instruction, supervision, or stand-by help
- the person uses special equipment such as hand rails or a seat in the shower stall
- the person never bathes at all (a highly unlikely possibility)
- the person receives no help, uses no special equipment or aids, but acknowledges having difficulty

HPPDDRES: Dressing is the overall complex behavior of getting clothes from closets and drawers and then putting the clothes on. Tying shoelaces is not considered part of dressing as is putting on socks or hose. Special dressing equipment includes items such as button hooks, zipper pulls, long-handled shoe horns, tools for reaching, and any clothing made especially for accommodating a person's limitations in dressing, such as Velcro fasteners or snaps.

HPPDEAT: A person eats without help if he or she can get food from the plate into the mouth. A person who does not ingest food by mouth (that is, is fed by tube or intravenously) is not considered to eat at all. Special eating equipment includes such items as a special spoon that guides food into the mouth, a forked knife, a plate guard, or a hand splint.

PRBBILS: Managing money refers to the overall complex process of paying bills, handling simple cash transactions, and generally keeping track of money coming in and money going out. It does not include managing investments, preparing tax forms, or handling other financial activities for which members of the general population often seek professional advice.

PRBLHWK and PRBHWWK: The distinction between light housework (PRBLHWK) and heavy housework (PRBHWWK) was made clear by examples. Washing dishes, straightening up and light cleaning represent light housework; scrubbing floors and washing windows represent heavy housework. The interviewer was not permitted to interpret the answer in light of the degree of cleanliness of the dwelling.

PRBMEAL: "Preparing meals" includes the overall complex behavior of cutting up, mixing and cooking food. The amount of food prepared is not relevant, so long as it would be sufficient to sustain a person over time. Reheating food prepared by someone else does not qualify as "preparing meals."

PRBSHOP: Shopping for personal items means going to the store, selecting the items and getting them home. Having someone accompany the beneficiary would qualify as help from another person.

PRBTELE: Using the telephone includes the overall complex behavior of obtaining a phone number, dialing the number, talking and listening, and answering the telephone.

### *Special Notes*

Since 2016, six global disability questions are released to comply with HHS guidance. The variables on the NAGIDIS segment are DISDECSN, DISWALK, DISBATH, and DISERRND. DISHEAR and DISSEE are included on the VISHEAR segment.

## **Nicotine and Alcohol (NICOALCO)**

### *Core Content*

This segment contains information on the prevalence and frequency of alcohol and nicotine use.

### *Variable Definitions*

EVERSMOK and SMOKNOW: Respondents are asked about whether they smoke. We do not ask the respondents about their use of chewing tobacco. Trying a cigarette once or twice was not considered "smoking", but any period of regular smoking, no matter how brief or long ago, was considered smoking. We ask if the respondent "now" smokes. We define "now" as being within the current month or so, and not just whether the respondent had a cigarette, cigar, or pipe tobacco on the day of the interview. Even the use of a very small amount at the present time qualified as a "yes." Stopping temporarily (as for a cold) qualified as a "yes." (EVERSMOK is an initial interview variable)

### *Special Notes*

In 2016, this section was revised to follow HHS guidelines on asking about nicotine and alcohol consumption. Please see codebook for variables now included in this section.

## **Outcome and Assessment Information (OASIS)**

### *Core Content*

This segment contains assessment information conducted while the beneficiary was receiving home health services.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

All home health records are included for survey participants for the year of interest.

## Part D Drug Plan Experience (RXPARTD)

### *Core Content*

The RX Supplement segment augments information from the Access to Care and Satisfaction with Care sections of the questionnaire for those beneficiaries enrolled in Medicare Part D.

### *Variable Definitions*

**OPTIONS CONSIDERED WHEN CHOOSING PRESCRIPTION DRUG COVERAGE:** These seven items were asked as a series of separate yes/no questions (Drug Coverage Questionnaire [RXQ] item RXP18).

**PDOPMOST:** This item includes data from a single question, with only one response allowed.

**REASONS DIDN'T USE CURRENT COVERAGE:** These six items were asked as a single question (RXQ item RX18), with multiple responses allowed. This question is asked of respondents who indicated that they did not use their current prescription drug coverage (variable RXUSEPLN).

**REASONS NOT ENROLLED IN MEDICARE PRESCRIPTION DRUG PLAN:** These 12 items are derived from a single question (RXQ item RX19), with multiple responses allowed. This question is asked for beneficiaries who do not have any of the following: a current Medicare prescription drug plan, a current Medicare managed care plan that has prescription coverage, or a current private plan that has prescription coverage.

### *Special Notes*

This questionnaire is administered the summer following the year of interest. The RXQ questions for the reference year 2016 were asked in the summer of 2017. Special non-response adjustment weights are included in the file to account for survey non-response from the fall to the summer data collection period. Note that counts of cases with positive topical module weights may vary within the data year and may change across years due to response rates, sample sizes, and fielding methods. The topical weights account for these changes. Please see the Weights section below for information on using weights with data from Topical Questionnaires.

A large amount of missing data was observed in the 2015 RXPARTD data file for the following 12 variables: PDNTRXCV, PDNTPRES, PDNTCOVR, PDNTENRL, PDNTPLAN, PDNTEXPS, PDNTCONF, PDNTMANY, PDNTBEFT, PDNTPDP, PDNTINTL, and PDNTOTHR.

These questions are derived from a select-all-that-apply question, PDNTENR. The question should be asked of beneficiaries who were not enrolled in Part D, which is denoted in the RXPARTD data file as H\_PARTD. The text of the question is:

"You said that [you are/(SP) is] not enrolled in a Medicare Prescription Drug plan. What is the reason [you are/he is/she is] not enrolled in such a plan?"

Among the 1,056 beneficiaries in the data file who had H\_PARTD=2 and were therefore expected to be asked PDNTENR, unexpected missing data was present for 664 (63%) for all 12 derived variables. An additional 11 beneficiaries answered Don't Know or Refused for PDNTENR. (These 11 answers are not problematic. This is how the data should appear for beneficiaries who reached PDNTENR but did not choose any of the 12 given options to the question).

There is a skip in the questionnaire that is driven by a flag derived from self-reported coverage and not administrative data. The flag was incorrectly populated due to a questionnaire error identified in the 2015 data, and due to its complexity, over the 2016 and 2017 data years, was iteratively edited and patched.

## Patient Activation (PNTACT)

### *Core Content*

The data in this segment can be used to assess the degree to which beneficiaries actively participate in their own health care and the decisions concerning that health care; measuring not only if beneficiaries receive information about their health and Medicare, but also if they understand it in a way that makes it useful.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

The Patient Activation Questionnaire (PAQ), is typically released in the data year prior to its administration. The PAQ questions for the reference year 2016 were asked in the summer of 2017. Special non-response adjustment weights are included in the file to account for survey non-response from the fall to the summer data collection period. Note that counts of cases with positive topical module weights may vary within the data year and may change across years due to response rates, sample sizes, and fielding methods. The topical weights account for these changes. Please see the Weights section below for information on using weights with data from Topical Questionnaires.

## Prescription Medication Usage (PMUSE)

### *Core Content*

This segment captures information about prescription medication usage including how beneficiaries pay for prescriptions and why they may not obtain a prescription.

### *Variable Definitions*

REASONS FOR NOT OBTAINING PRESCRIPTION: These items are asked for respondents who indicated in item PMNOTGET that there were prescriptions that they did not obtain. A single question (Satisfaction with Care Questionnaire [SCQ] item SC17A) is initially asked, with ten possible response options and multiple responses allowed, which are then coded into the ten relevant Yes/No variables in the PMUSE data file: SCPMCOST, SCNOHELP, SCPMREAC, SCPMNLKE, SCPMNCND, SCPMNOCV, SCPMTROB, SCPMSMPL, SCPMSUBS, and SCPMOTHR. In addition, the next question (SCPMMAIN) asks the main reason why the prescription was not obtained, with one response allowed.

### *Special Notes*

N/A

## Preventive Care (PREVCARE)

### *Core Content*

This segment provides data on preventative services such as vaccinations and routine screening procedures such as mammograms and colonoscopies.

### *Variable Definitions*

Respondents were asked questions with regard to preventative services and behaviors: mammogram, Pap smear, prostate screening, diabetes screening, colon cancer screening, Flu, Shingles and Pneumonia shots, and blood pressure screening.

### *Special Notes*

N/A

## Residence Timeline (RESTMLN)

### *Core Content*

The RESTMLN segment provides a timeline of each setting in which a beneficiary resided over the course of the year. The total number of setting changes is recorded in the NUMSIT variable, while each transition is identified with a begin data and a code representing the type of setting.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment. There are some variables on this segment that were derived or created by combining two or more survey variables. These derived variables are preceded with the characters "D\_". Variables are created or modified in order to recode data items, to protect the confidentiality of survey participants, or to globally edit some values.

The number of variables in the series D\_SIT1 – D\_SIT $n$  and D\_CODE1 – D\_CODE $n$  will correspond to the maximum number of settings in a given a file year.

The variable D\_SIT1 will represent whichever occurs first: the date corresponding to the beneficiary's first Inpatient, Hospice, or SNF fee for service utilization of the year, or their participation in the survey. If utilization occurs first, periods occurring outside of one of the aforementioned fee-for-service events, but prior to a beneficiary's enrollment in the survey, will be denoted with a setting type (D\_SIT1-D\_SIT $n$ ) of 'N.'

### *Special Notes*

The 2015 segment was included with the Cost Supplement LDS for data year 2015 only, as it was constructed using the Cost Supplement weights. For the 2016 data year and beyond, the segment is included with the Survey File LDS.

## Satisfaction with Care (SATWCARE)

### *Core Content*

This segment contains data on satisfaction with health care and reasons why beneficiaries do not seek medical care.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

Open-ended questions: Respondents were asked a number of open-ended questions (reasons for dissatisfaction with care, kinds of problems experienced in getting health care, etc.). The respondents answered these questions in their own words, and interviewers recorded the responses verbatim. The interviewer was prohibited from paraphrasing or summarizing the respondents' answer.

This file contains no verbatim responses. We have supplied, instead, codes that summarize the answer. Often there will be more than one code because the answer included several specific topics.

### *Special Notes*

Verbatim questions VCMCDIS1, VCMCDIS2, VCMCDIS3, VCMCDIS4, MCDISVB, and SCROTOS were back coded into response categories; verbatim text is not released.

The questions about satisfaction with care represent the respondent's general opinion of all medical care received in the year preceding the interview.

MCDRNSEE: If a respondent mentioned any health problem that was not cared for, it was recorded without discrimination; the respondent might have referred to a small ache or pain, or to a serious illness or symptom.

## Usual Source of Care (USCARE)

### *Core Content*

This segment contains data on where and how the beneficiary typically seeks medical care. In 2015, this segment included additional variables adapted from the Patient Perception of Integrated Care (PPIC) survey instrument developed by Harvard School of Public Health.<sup>4</sup> These items were removed in the 2016 data year, and now reflects the same data as collected in 2013 and prior Access to Care files.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

USHOWLNG: If the beneficiary had an actual visit with the doctor listed in USUALDOC by the time of the interview, "less than one year" was coded.

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<sup>4</sup> Singer et al., "Development and Preliminary Validation of the Patient Perceptions of Integrated Care Survey," Medical Care Research and Review 70, no. 2.

## *Special Notes*

N/A

## **Vision and Hearing (VISHEAR)**

### *Core Content*

This file contains information on the beneficiary's eye health and hearing status.

### *Variable Definitions*

Please see the Codebook for information regarding variables in this segment.

### *Special Notes*

Since 2016, six global disability questions are released to comply with HHS guidance. DISHEAR and DISSEE are included on the VISHEAR segment. Variables DISDECSN, DISWALK, DISBATH, and DISERRND are included on the NAGIDIS segment.

## **Weights**

### *Cross Sectional Weights*

Two types of weights are provided, cross-sectional weights and longitudinal weights. Cross-sectional weights apply to the entire file of all those who completed an interview, either Community or Facility. The first set of cross-sectional weights (CENWGTS) can be used for making estimates of the population of Medicare beneficiaries who were continuously enrolled in Medicare from January 1<sup>st</sup> up to and including their fall interview (i.e., the "continuously enrolled" population). The second set of cross-sectional weights (EVRWGTS) can be used for making estimates of the population of Medicare beneficiaries who were enrolled in Medicare at any time during the entire calendar year (i.e., the "ever enrolled" population).

### *Longitudinal Weights<sup>5</sup>*

Longitudinal weights allow for the study of respondents across data years.

Two-year longitudinal weights (LNG2WGTS) apply to respondents who completed fall round interviews in the current and the preceding year. This set of weights can be used to study data trends over a two-year period and apply to members of the 2013, 2014, and 2015 panels who were alive and entitled as of the Fall 2016 (Round 76) interview, had 2015 and 2016 Survey File data, and enrolled on or before 1/1/2015. By applying these weights to data in the current and preceding year, users will be able to estimate change among the Medicare population who were alive for the full two-year period.

Given that 2014 MCBS data was not released, there are no three-year longitudinal weights in the 2016 Survey File LDS.

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<sup>5</sup> Beginning with the 2016 LDS, the Survey File longitudinal weight names reflect the number of years the beneficiary was enrolled in Medicare (i.e., LNG2WGTS weights are referred to as 'two-year' rather than 'one-year' as they represent the population continuously enrolled for two years). This change was made to align the names of the longitudinal weights in the Survey File LDS with the naming convention used for the Cost Supplement LDS.

Four-year longitudinal weights (LNG4WGTS) apply to respondents who completed fall round interviews in the current and the three preceding years. This set of weights can be used to study data trends over a four-year period and are populated for members of the 2013 panel who were alive and entitled as of the Fall 2016 (Round 76) interview, had Survey File data in 2013 and 2016, enrolled on or before 1/1/2013, and were continuously enrolled through the fall of 2016 (i.e., four years). By applying these weights to data in the current and the three preceding years, users will be able to estimate change among the Medicare population who were alive for the full four-year period.

For a further discussion about the ever enrolled and continuously enrolled populations and obtaining weighted estimates using these files, please see the MCBS Data User's Guide: General Information. For discussion on how the weights files were created, please refer to the MCBS Methodology Report. Both documents can be found on the CMS website at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/codebooks.html>.

### *Using weights with data from Topical Questionnaires*

To generate estimates using the data from one of the five Topical Questionnaire sections (FOODINS, INCASSET, MCREPLNQ, PNTACT, RXPARTD) on their own or merged with another Survey File segment that does not contain special non-response adjustment weights, the analyst must always use the special non-response adjustment general and replicate weights included in the Topical segment INSTEAD of using the general and replicate weights that appear in the separate weight segments (CENWGTS, EVRWGTS). Note that counts of cases with positive topical module weights may vary within the data year and may change across years due to response rates, sample sizes, and fielding methods. The topical weights account for these changes.

There are no weights that support joint analysis between two topical modules. Each segment with data from Topical Questionnaires has a different set of beneficiaries included. A user could merge data from one Topical segment onto another and then use one of the Topical segment's weights as the Baseline population, but the data will not align and there will be gaps. For some combinations of the different questionnaire sections, the amount of missing data may be small enough that users could still conduct analyses.

## 4. REFERENCES

HIPxCHANGE. *Area Deprivation Index Datasets*. <https://www.hipxchange.org/ADI>.

National Health and Aging Trends Study. Round 1 Data Collection Instrument Sections, Income and Assets. [https://www.nhats.org/scripts/instruments/40\\_IA\\_Round\\_1\\_Finalv2.pdf](https://www.nhats.org/scripts/instruments/40_IA_Round_1_Finalv2.pdf).

Singer, Sara J., Mark W. Friedberg, Mathew V. Kiang, Toby Dunn, and Diane M. Kuhn. "Development and preliminary validation of the patient perceptions of integrated care survey." *Medical Care Research and Review* 70, no. 2 (2013): 143-164.

# APPENDICES

## 5. APPENDICES

### Appendix A: MCBS Common Definitions

**Activities of daily living (ADLs):** Activities of daily living are activities related to personal care. They include bathing or showering, dressing, getting in and out of bed or a chair, walking, using the toilet, and eating.

**Baseline interview:** The initial questionnaire administered to new respondents to the study; administered in the fall of the year they are selected into the sample (interview #1).

**Beneficiary:** An individual selected from MCBS' sample about whom the MCBS collects information. Beneficiary may also refer to a person receiving Medicare services who may or not be participating in the MCBS.

**Claim-only event:** A claim-only event is a medical service or event known only through the presence of a Medicare claim. The event did not originate from an event or service reported by a respondent during an interview.

**Community component:** Survey of beneficiaries residing in the community at the time of the interview (i.e., not in a long-term care facility such as a nursing home). Beneficiaries answered health status and functioning questions themselves, unless they were unable to do so.

**Continuing interview:** The questionnaire administered to repeat respondents as they progress through the study (interviews #2-12).

**Continuously enrolled (aka always enrolled):** A Medicare beneficiary who was enrolled in Medicare from the first day of the calendar year until the fall interview and did not die prior to the fall round. This population excludes beneficiaries who enrolled during the calendar year 2015, those who dis-enrolled or died prior to their fall interview, residents of foreign countries, and residents of U.S. possessions and territories other than Puerto Rico.

**Core modules:** These sections of the MCBS Questionnaire are of critical purpose and policy relevancy to the MCBS, regardless of season of administration.

**Crossover:** A respondents who enters a long-term care facility setting (e.g., nursing homes) or who alternates between a community and a facility setting.

**Current-year Enrollee:** Beneficiaries who were eligible and enrolled in Medicare (Parts A or B) anytime from January 1 to December 31 of the year the sample was selected.

**Ever enrolled:** A Medicare beneficiary who was enrolled at any time during the calendar year including those who dis-enrolled or died prior to their fall interview. Excluded from this population are residents of foreign countries and of U.S. possessions and territories other than Puerto Rico.

**Exit interview:** Conducted in the summer round, this interview completes the respondent's participation in the MCBS (interview #12). The exit interview is a special case of the Continuing interview.

**Facility component:** Survey of beneficiaries residing in facilities, such as long-term care nursing homes or other institutions, at the time of the interview. Facility interviewers do not conduct the Facility component with

the respondent, but with a staff member located at the facility. This is a key difference between the Community and Facility components.

**Fee-for-Service (FFS) payment:** Fee-for-Service is a method of paying for medical services in which each service delivered by a provider bears a charge. This charge is paid by the patient receiving the service or by an insurer on behalf of the patient.

**Field interviewer:** The principal contact for collecting and securing respondent data.

**Field manager:** A supervisor who motivates and manages a group of field interviewers to meet the goals of high quality data collection on time and within budget limits.

**Incoming Panel Sample (formerly known as Supplemental Panel):** A scientifically selected group of sampled beneficiaries that enter the MCBS in the fall of a data collection year. One panel is retired during each summer round, and a new panel is selected to replace it each fall round. Panels are identified by the data collection year (e.g., 2015 panel) in which they were selected.

**Initial Interview Variable:** A variable that is included in the Baseline survey (i.e., the first survey that a beneficiary completes as a participant of the MCBS).

**Instrumental activities of daily living (IADLs):** Instrumental activities of daily living are activities related to independent living. They include preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone. If a beneficiary had any difficulty performing an activity by himself/herself, or did not perform the activity at all, because of health problems, the person was deemed to have a limitation in that activity. The limitation may have been temporary or chronic at the time of the survey. Facility interviewers did not ask about the beneficiary's ability to prepare meals or perform light or heavy housework, since they are not applicable to the beneficiary's situation; however, interviewers did question proxies about the beneficiary's ability to manage money, shop for groceries or personal items, or use a telephone.

**Internal Sample Control File:** A data file that contains every beneficiary sampled back through the beginning of MCBS. The file contains sampling information, year of selection, primary sampling unit, secondary sampling unit, contact information, and other sampling demographic information as well as final disposition codes to indicate completion status per round, component fielded per round, dates of death, and lost entitlement information.

**Long-term care facility:** A facility that provides rehabilitative, restorative, and/or ongoing skilled nursing care to patients or residents in need of assistance with activities of daily living.

**Medicare:** Medicare is the federal health insurance program for people who are 65 or older, certain younger people with disabilities, and people with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant, sometimes called ESRD). The different parts of Medicare help cover specific services:

- Hospital Insurance (Part A): covers inpatient hospital stays, care in a skilled nursing facility, hospice care, and some home health care.
- Medical Insurance (Part B): covers certain doctors' services, outpatient care, medical supplies, and preventive services.
- Medicare Advantage (Part C): an alternative to coverage under traditional Medicare (Parts A and B), a health plan option similar to a Health Maintenance Organization (HMO) or Preferred Provider Organization (PPO) administered by private companies.

- Prescription Drug Coverage (Part D): additional, optional coverage for prescription drugs administered by private companies.

For more information, please visit the Medicare.gov website at <https://www.medicare.gov/sign-up-change-plans/decide-how-to-get-medicare/whats-medicare/what-is-medicare.html>

**Medicare Advantage (MA):** Medicare Advantage Plans, sometimes called “Part C” or “MA Plans,” are offered by private companies approved by Medicare. An MA provides, or arranges for the provision of, a comprehensive package of health care services to enrolled persons for a fixed capitation payment. The term “Medicare Advantage” includes all types of MAs that contract with Medicare, encompassing risk MAs, cost MAs, and health care prepayment plans (HCPPs).

**Medicare beneficiary (aka, beneficiary):** An individual who meets at least one of three criteria (is aged 65 years or older, is under age 65 with certain disabilities, or is of any age with End-Stage Renal Disease) and is entitled to health insurance benefits. (Source: <https://www.cms.gov/Medicare/Medicare-General-Information/MedicareGenInfo/index.html>).

**Minimum Data Set (MDS):** The Minimum Data Set (MDS) is part of the federally mandated process for clinical assessment of all residents in Medicare and Medicaid certified nursing homes. For more information, please visit <https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/Minimum-Data-Set-3-0-Public-Reports/index.html>.

**Panel:** see Incoming Panel Sample

**Personal health care expenditures:** Personal health care expenditures consist of health care goods and services purchased directly by individuals. They exclude public program administration costs, the net cost of private health insurance, research by nonprofit groups and government entities, and the value of new construction put in place for hospitals and nursing homes.

**Prescription medicines:** The basic unit measuring use of prescription medicines is a single purchase of a single drug in a single container. Prescription drug use is collected only for beneficiaries living in the community or in a facility, and does not include prescription medicines administered during an inpatient hospital stay.

**Primary Sampling Unit (PSU):** Primary sampling unit refers to sampling units that are selected in the first (primary) stage of a multi-stage sample ultimately aimed at selecting individual elements (Medicare beneficiaries in the case of MCBS). PSUs are made up of major geographic areas consisting of metropolitan areas or groups of rural counties.

**Race/ethnicity:** Responses to race and ethnicity questions are self-reported by the respondent. Respondents who reported they were white and not of Hispanic origin were coded as white non-Hispanic; those who reported they were black/African-American and not of Hispanic origin were coded as black non-Hispanic; persons who reported they were Hispanic, Latino/Latina, or of Spanish origin, regardless of their race, were coded as Hispanic; persons who reported they were American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, two or more races, or other race and not of Hispanic origin were coded as other race/ethnicity.

**Reference Period:** The timeframe to which a questionnaire item refers.

**Residence status:** Full-year community residents are Medicare beneficiaries who lived solely in household units during the data collection year and who received community interviews only. Full-year facility residents

are Medicare beneficiaries who lived solely in a long-term care facility during the data collection year and who received Facility interviews only. Part-year community/part-year facility residents are Medicare beneficiaries who lived part of the year in the community and part of the year in a long-term care facility, and who received both Community and Facility interviews. Skilled nursing facility users are Medicare beneficiaries who lived in either the community or a facility, and who used skilled nursing facility services during the data collection year.

**Respondent:** The person who answers questions about the beneficiary for the MCBS; this person can be the beneficiary themselves, a proxy, or a staff member located at a facility where the beneficiary resides.

**Round:** The MCBS data collection period. There are three distinct rounds each year; winter (January through April); summer (May through August); and fall (September through December).

**Sample person:** An individual beneficiary selected from MCBS' Incoming Panel sample to participate in the MCBS survey.

**Survey-reported event:** A survey-reported event is a medical service or event reported by a respondent during an interview. The event may have been matched to a Medicare claim, or it may be a survey-only event, in which case it was not matched to a Medicare claim and is only known through the survey.

**Secondary Sampling Unit (SSU):** SSUs are made up of census tracts or groups of tracts within the selected PSUs.

**Topical sections:** Sections of the MCBS Questionnaire that collect information on special interest topics. They may be fielded every round or on a seasonal basis. Specific topics may include housing characteristics, drug coverage, and knowledge about Medicare.

**Ultimate Sampling Unit (USU):** USUs are Medicare beneficiaries selected from within the selected SSUs.

## Appendix B: MCBS Rounds by Data Year and Season

| Year | Winter | Summer | Fall |
|------|--------|--------|------|
| 1991 | n/a    | n/a    | 1    |
| 1992 | 2      | 3      | 4    |
| 1993 | 5      | 6      | 7    |
| 1994 | 8      | 9      | 10   |
| 1995 | 11     | 12     | 13   |
| 1996 | 14     | 15     | 16   |
| 1997 | 17     | 18     | 19   |
| 1998 | 20     | 21     | 22   |
| 1999 | 23     | 24     | 25   |
| 2000 | 26     | 27     | 28   |
| 2001 | 29     | 30     | 31   |
| 2002 | 32     | 33     | 34   |
| 2003 | 35     | 36     | 37   |
| 2004 | 38     | 39     | 40   |
| 2005 | 41     | 42     | 43   |
| 2006 | 44     | 45     | 46   |
| 2007 | 47     | 48     | 49   |
| 2008 | 50     | 51     | 52   |
| 2009 | 53     | 54     | 55   |
| 2010 | 56     | 57     | 58   |
| 2011 | 59     | 60     | 61   |
| 2012 | 62     | 63     | 64   |
| 2013 | 65     | 66     | 67   |
| 2014 | 68     | 69     | 70   |
| 2015 | 71/72  | 71/72  | 73   |
| 2016 | 74     | 75     | 76   |
| 2017 | 77     | 78     | 79   |
| 2018 | 80     | 81     | 82   |

## Appendix C: Technical Appendix

### *Using the Data*

Data users can merge segments within and/or across the Survey File and Cost Supplement File. What follows below is a hypothetical research question with sample SAS® code for the construction of an analytic file. In this example, we are interested in studying the usual source of care for community-dwelling Medicare beneficiaries with diabetes.

First, there are two measures required to identify our study population: residence status and self-reported diabetes. These variables can be found in the following Survey File segments, respectively: Demographics (DEMO) and Chronic Conditions (CHRNCOND). Usual source of care information is found in the Usual Source of Care (USCARE). To ensure estimates are representative of the continuously enrolled Medicare population, we will also require the CENWGTS file.

Below, we show how multiple Survey File segments can be merged with the CENWGTS segment in SAS using BASEID as the key variable. When merging segments, all observations in the CENWGTS segment should be preserved.

```
data merged;
  merge survey16.CENWGTS (in=a)
        survey16.DEMO (keep = BASEID H_AGE INT_TYPE)
        survey16.CHRNCOND (keep = BASEID D_OCDTYP)
        survey16.USCARE
        (keep = BASEID PLACEPAR PLACEKND);
  by BASEID;
  if a;
run;
```

In order to segment the file to community-dwelling beneficiaries only, we would then segment the file on the variable INT\_TYPE.

```
data merged_surveyfile;
  set merged;
  where INT_TYPE = 'C'; /* denotes individuals living only in the community */
run;
```

We now have an analytic file that includes all the Survey File variables and weights required to analyze usual source of care for community-dwelling Medicare beneficiaries with diabetes.

```
proc print data=merged_surveyfile(obs=10);
  var BASEID H_AGE INT_TYPE D_OCDTYP PLACEPAR PLACEKND;
run;
```