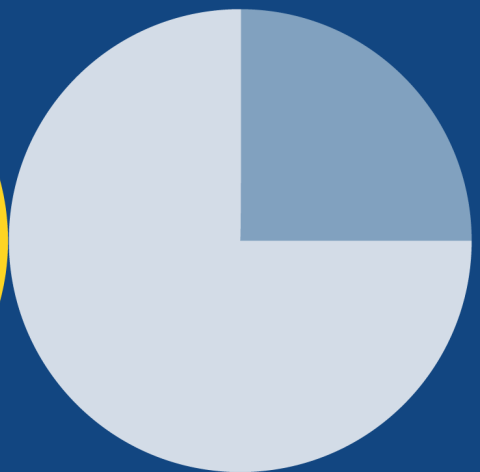
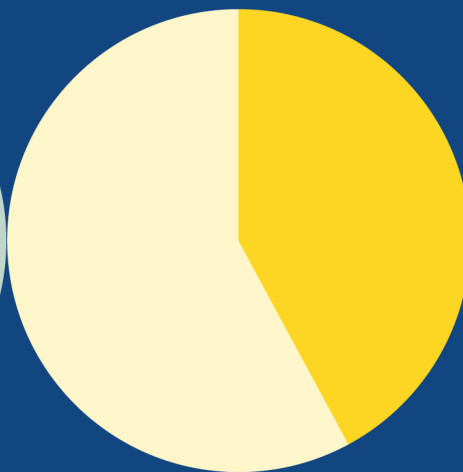
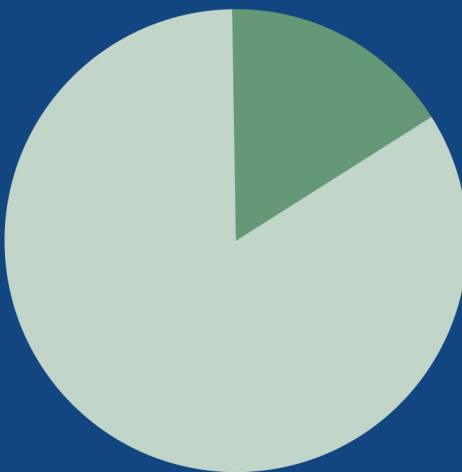


2018 | CHARTBOOK

cost **health care access** **quality of life** **risk factors**
diseases & conditions **medical procedures**
satisfaction **outcomes** **health behaviors**



Version Control Log

| Date | Version | Revisions |
|------------|---------|----------------------------|
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OVERVIEW

OVERVIEW

Medicare is the nation's health insurance program for persons aged 65 years and over and for persons younger than 65 years who have a qualifying disability. People under age 65 who receive Social Security Disability Insurance (SSDI) payments generally become eligible for Medicare after a two-year waiting period, while those diagnosed with end-stage renal disease (ESRD) and amyotrophic lateral sclerosis (ALS) become eligible for Medicare with no waiting period. Medicaid is a federal-state health insurance program for low-income Americans. Dual eligible beneficiaries are persons who are eligible for both Medicare and Medicaid.

The Medicare Current Beneficiary Survey (MCBS) was implemented in 1991 to serve as a source of information for administering the Medicare program, estimating health care expenditures for beneficiaries, and providing a better understanding of the health and well-being of the Medicare population. A leading source of information on Medicare and its impact on beneficiaries, the MCBS provides important data on beneficiaries that are not available in CMS administrative data and plays an essential role in monitoring and evaluating beneficiary health status and health care policy. The MCBS collects comprehensive data on beneficiary health insurance coverage, health care utilization and costs, access to care, and satisfaction with care, as well as special interest topics including drug coverage, knowledge about the Medicare program and housing characteristics. Data from the MCBS are used to inform many government programs and analyses, including fiscal projections produced by the Congressional Budget Office and the Medicare Payment Advisory Commission, and are published in a wide array of peer-reviewed journals.

The MCBS is a continuous, in-person, multi-purpose longitudinal survey. It represents the population of Medicare beneficiaries aged 65 and over and beneficiaries aged 64 and under with certain disabling conditions living in the United States. The MCBS is sponsored by the Office of Enterprise Data and Analytics (OEDA) of the Centers for Medicare & Medicaid Services (CMS). In its rotating panel design, each beneficiary is statistically sampled as part of a panel and is interviewed up to three times per year over a four year period. The MCBS has been carried out continuously for more than 25 years, and more than one million interviews have been conducted since its inception.

The MCBS Chartbook provides the public with a collection of charts and tables presenting estimates from both the MCBS Survey File and Cost Supplement File. The Survey File contains data collected directly from respondents and supplemented by administrative items plus facility (non-cost) information and Medicare Fee-for-Service claims. The Cost Supplement File contains both individual event and summary files and can be linked to the Survey File to conduct analyses on health care cost and utilization. Beginning with data year 2015, the MCBS Chartbook is updated annually to publicly disseminate current estimates for the Medicare population. Most of the estimates in the Chartbook were included in the previous two sourcebook (data tables) series: the [Health and Health Care of the Medicare Population](#), and the [Characteristics and Perceptions of the Medicare Population](#). The MCBS Chartbook is organized as follows:

- **Special Feature:** selected measures included as a "special feature" in a specific issue of the Chartbook.
- **Section 1: Who Is in the Medicare Population?:** demographic and socioeconomic characteristics of Medicare beneficiaries.

- **Section 2: How Healthy Are Medicare Beneficiaries?:** health status and health behaviors of Medicare beneficiaries.
- **Section 3: What Is the Medicare Population's Access to Care and How Satisfied Are Beneficiaries with Their Care?:** access to and satisfaction with health care services.
- **Section 4: What Health Care Services Do Medicare Beneficiaries Receive?:** health care use by Medicare beneficiaries across nine service categories, including: inpatient hospital services, outpatient hospital services, physician/supplier services, dental services, prescription drugs, Medicare hospice, Medicare home health, skilled nursing facility care, and long-term facility care.
- **Section 5: How Much Do Health Care Services for the Medicare Population Cost?:** health care expenditures and all sources of payment across service categories.

The 2018 MCBS Chartbook contains a Special Feature section with selected measures unique to this issue of the Chartbook. Estimates using data from the Survey File are found throughout the Chartbook. Estimates using data from the Cost Supplement File are found in Chartbook Sections 4 and 5. The Appendices (glossary, technical documentation, and measure construction appendix) contain additional information for the Chartbook.

The **Detailed Tables** section contains the complete point estimates and standard errors for each exhibit in the Chartbook. The MCBS interviews a sample of Medicare beneficiaries. Therefore, standard errors are reported for all estimates in the Chartbook. The tables are numbered to align with their corresponding chart exhibits. For example, Table 1.1 corresponds to Exhibit 1.1, and Tables 1.5.a and 1.5.b correspond to Exhibit 1.5. In addition to the tables corresponding to each of the chart exhibits, this section of the Chartbook also contains tables with estimates for the Medicare population that do not appear in chart form in the prior sections of the Chartbook. These supplementary tables are numbered following the tables corresponding to the chart exhibits. For example, Exhibit 1.6 is the last chart exhibit in Section 1, so the supplementary tables for Section 1 begin after Table 1.6, with Table 1.7.

Appendix A contains a glossary with definitions of terms and variables. **Appendix B** contains technical documentation regarding the Chartbook. **Appendix C** contains detailed documentation on the construction of measures in the Chartbook.

WHAT'S NEW IN 2018?

The 2018 MCBS Chartbook features several important updates. Starting with the 2018 Chartbook, two measures have been permanently added to the Chartbook: 1) self-reported limited English proficiency in Section 1 and 2) out-of-pocket Medicare premium expenditures in Section 5.

The 2018 MCBS Chartbook includes a special feature on language use among Medicare beneficiaries. This feature characterizes beneficiary experience with language use and health care, including preferred language for medical care, problem understanding a medical situation due to a language barrier, and persons who provide assistance communicating with a medical provider.

To better characterize out-of-pocket spending among Medicare beneficiaries, Section 5 includes a new exhibit presenting annual out-of-pocket Medicare premium expenditures. In addition, the construction of the smoking status measure was updated to consistently address missingness between the community and facility universes. The definition of chronic conditions was updated to

be more consistent with other publically available definitions. These changes are summarized in Table 1.0.

Table 1.0. 2018 MCBS Chartbook Summary of Updates to Measures

| Measure | Description | Exhibits/Tables |
|---|--------------------------|-----------------|
| Language Other than English Spoken at Home | Added as special feature | S.1./S.1.a. |
| Preferred Language for Medical Care | Added as special feature | S.1./S.1.b. |
| Problem Understanding a Medical Situation Due to a Language Barrier | Added as special feature | S.2. |
| Persons Who Provide Assistance Communicating with Medical Provider | Added as special feature | S.3. |
| Self-Reported Limited English Proficiency | Added | 1.2 |
| Smoking Status | Updated construction | 2.8 |
| Number of Chronic Conditions | Updated construction | 2.17 |
| Out-of-Pocket Medicare Premium Expenditures | Added | 5.14 |

For questions or suggestions on this document or other MCBS data-related questions, please email MCBS@cms.hhs.gov.

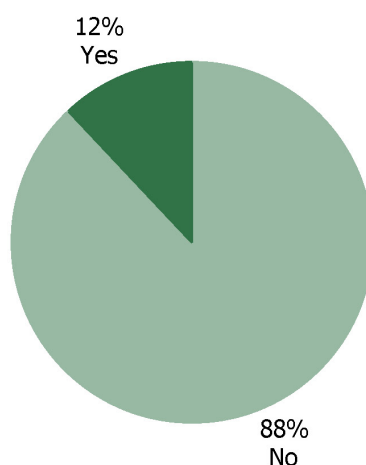
SPECIAL FEATURE

SPECIAL FEATURE: LANGUAGE USE BY MEDICARE BENEFICIARIES

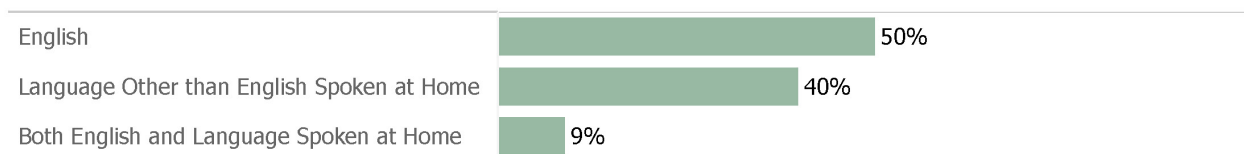
The charts in this section show selected measures included as a "special feature" in this issue of the Chartbook.

Exhibit S.1. Language Use Among Beneficiaries Living Only in the Community, 2018

Language Other than English Spoken at Home



Preferred Language for Medical Care Among Medicare Beneficiaries Who Speak a Language Other than English at Home and Have a Usual Doctor or Clinic Where They Receive Care

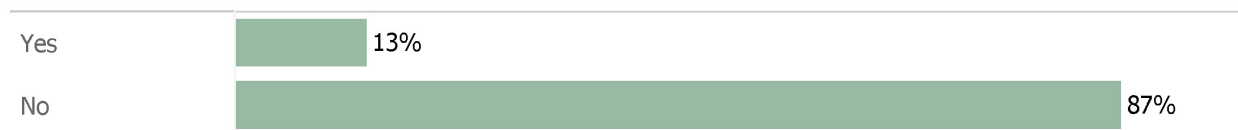


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. An estimate is not presented for the "Other" category of Preferred Language for Medical Care, although it is included in the denominator.

Exhibit S.2.

Problem Understanding a Medical Situation Due to a Language Barrier Among Medicare Beneficiaries Living Only in the Community Who Self-Reported Limited English Proficiency and Speak a Language Other than English at Home, 2018

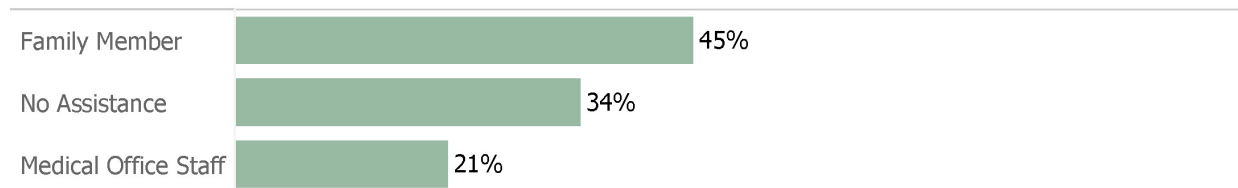


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Exhibit S.3.

Persons Who Provide Assistance Communicating with Medical Provider to Beneficiaries Living Only in the Community Who Self-Reported Limited English Proficiency and Speak a Language Other than English at Home, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

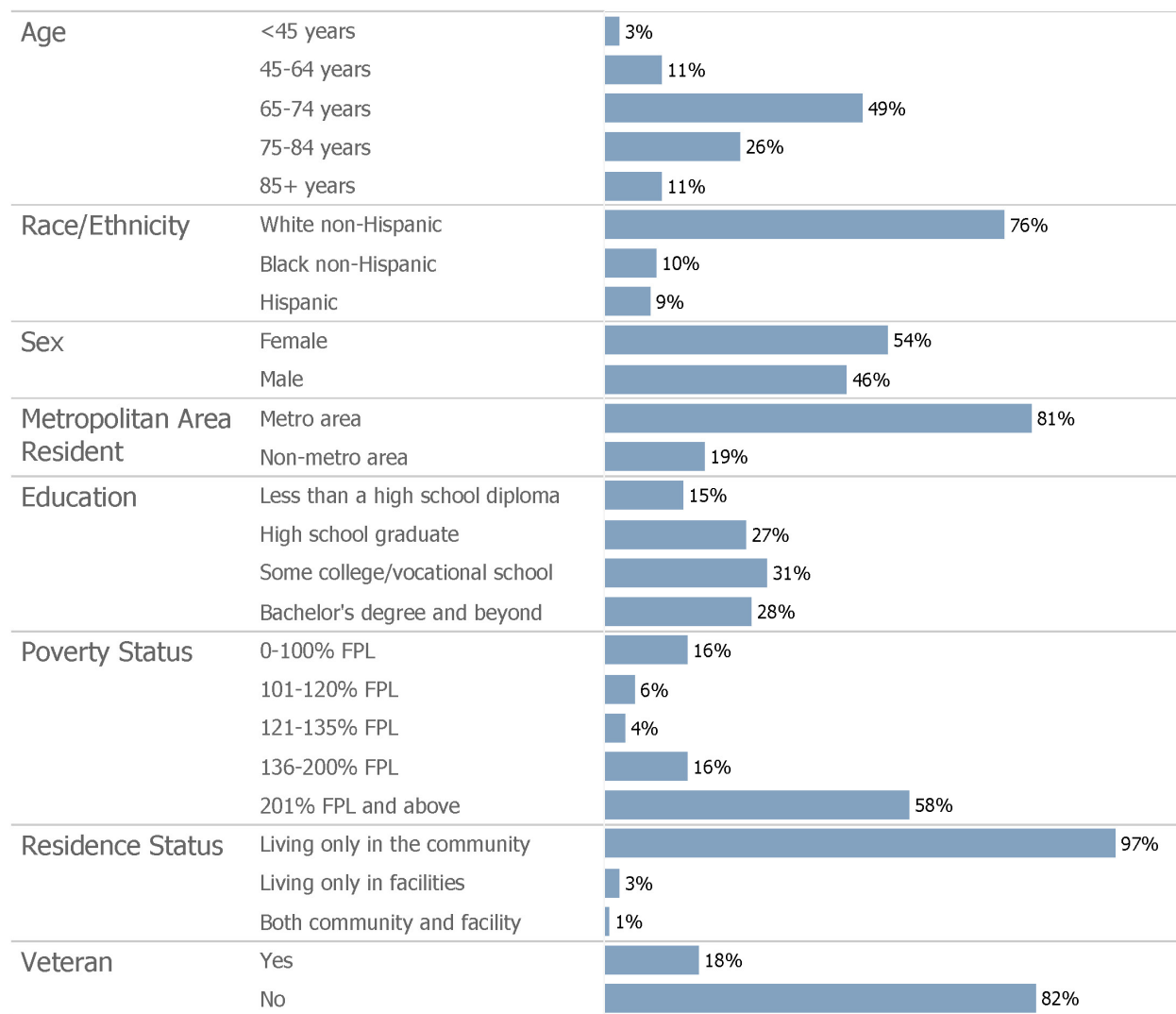
NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

WHO IS IN THE MEDICARE POPULATION?

1. WHO IS IN THE MEDICARE POPULATION?

The charts in Section 1 show the demographic and socioeconomic characteristics of Medicare beneficiaries, including supplemental insurance coverage and residence status.

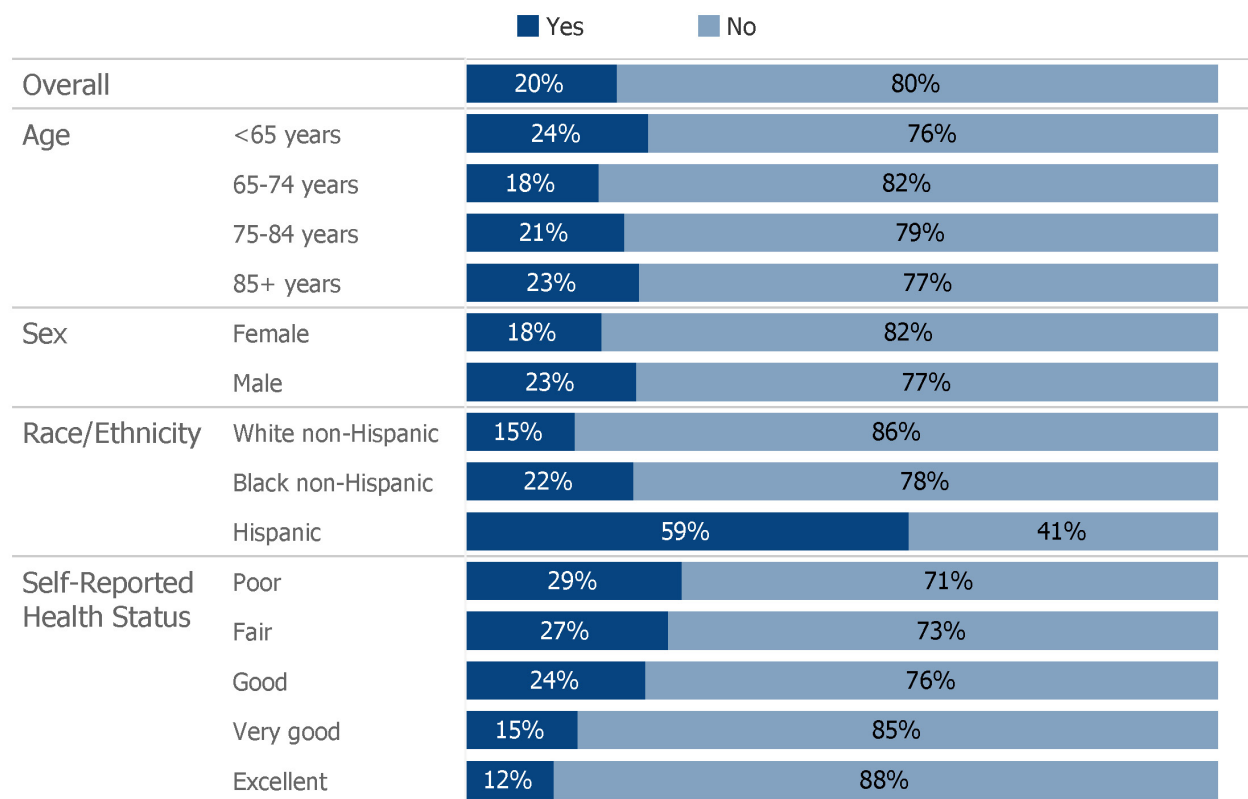
Exhibit 1.1.
**Demographic and Socioeconomic Characteristics of
All Medicare Beneficiaries, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category, although they are included in the denominator. FPL stands for Federal Poverty Level.

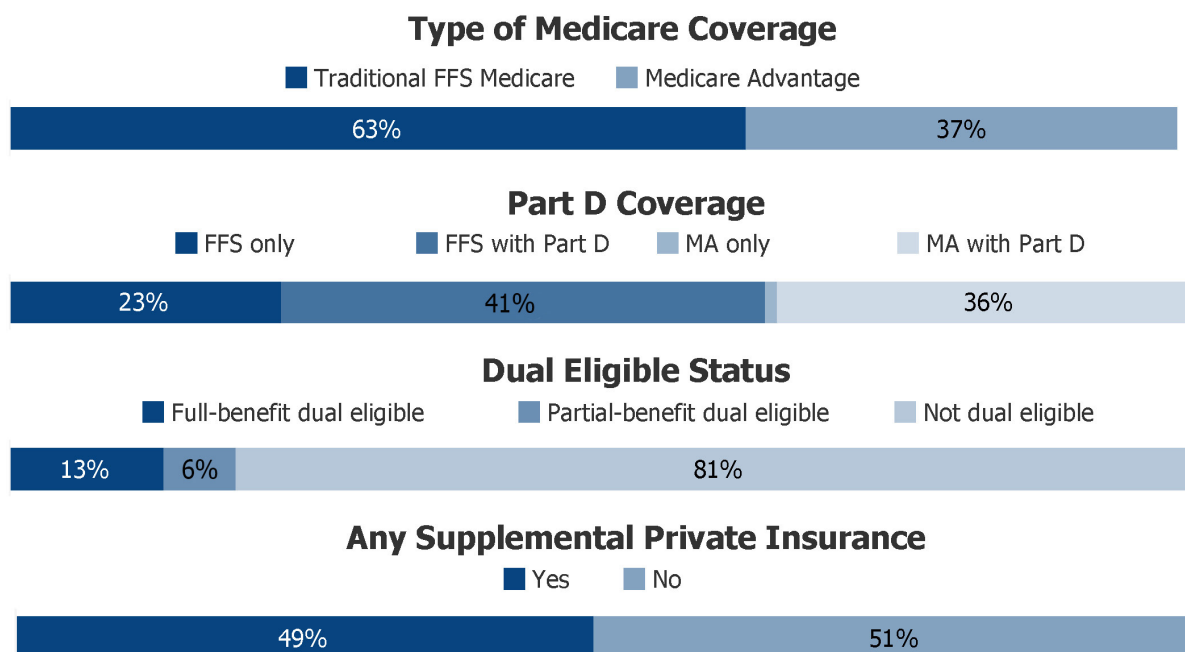
Exhibit 1.2.
Self-Reported Limited English Proficiency Among Beneficiaries
Living Only in the Community Overall and by Age, Sex,
Race/Ethnicity, and Self-Reported Health Status, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Exhibit 1.3.
Insurance Coverage of All Medicare Beneficiaries, 2018

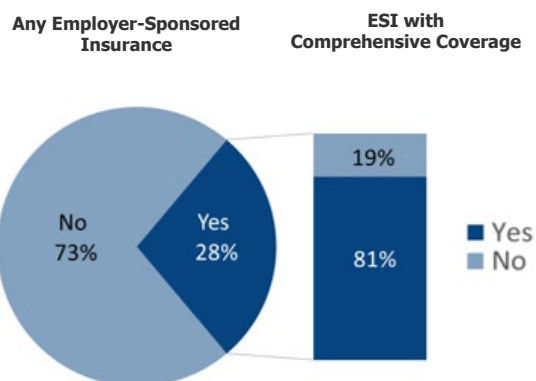


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

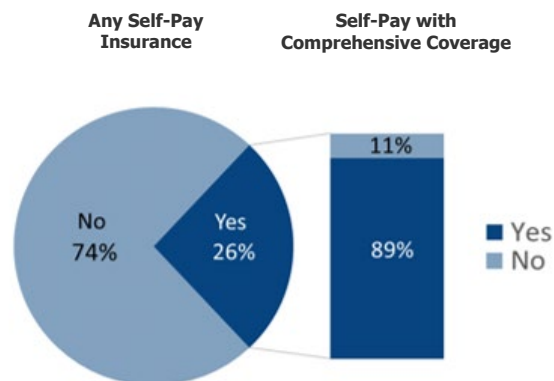
NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. FFS stands for Fee-for-Service. MA stands for Medicare Advantage.

Exhibit 1.4.
**Supplemental Private Insurance Coverage of Medicare
 Beneficiaries Living in the Community, 2018**

Employer-Sponsored Insurance



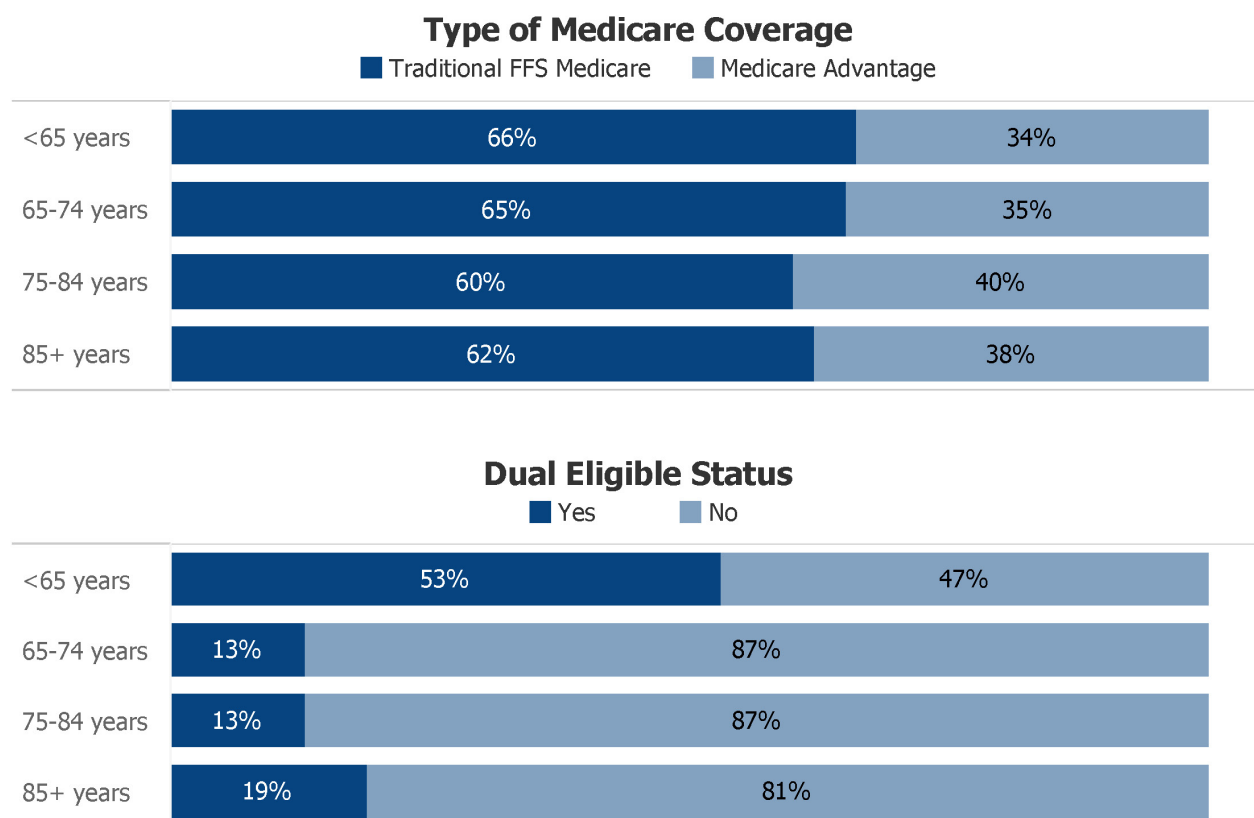
Self-Pay Insurance



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. ESI stands for Employer-Sponsored Insurance.

Exhibit 1.5.
**Type of Medicare Coverage and Dual Eligible Status of
 All Medicare Beneficiaries by Age, 2018**

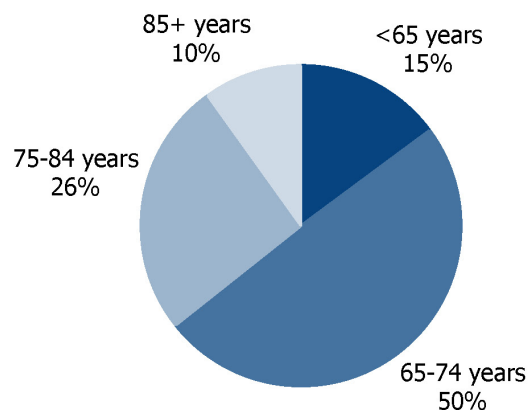


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

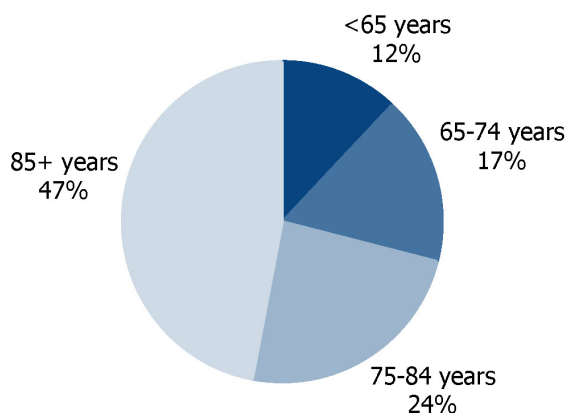
NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. FFS stands for Fee-for-Service. For Dual Eligible Status, "Yes" includes beneficiaries with both full-benefit and partial-benefit Medicaid coverage.

Exhibit 1.6.
Residence Status of All Medicare Beneficiaries by Age, 2018

Living only in the community



Living only in facilities



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates for the category "Both community and facility" are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix.

HOW HEALTHY ARE MEDICARE BENEFICIARIES?

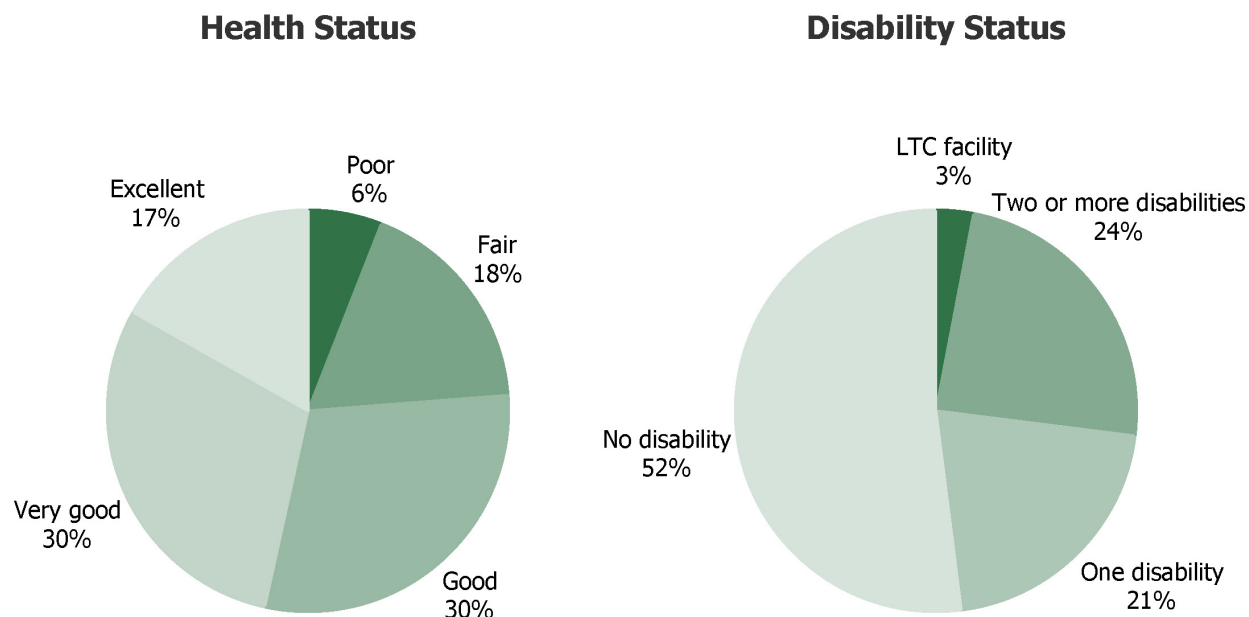
2. HOW HEALTHY ARE MEDICARE BENEFICIARIES?

PERCEIVED HEALTH AND FUNCTIONING

The charts in this section show the health status and disability status of Medicare beneficiaries.

Exhibit 2.1.

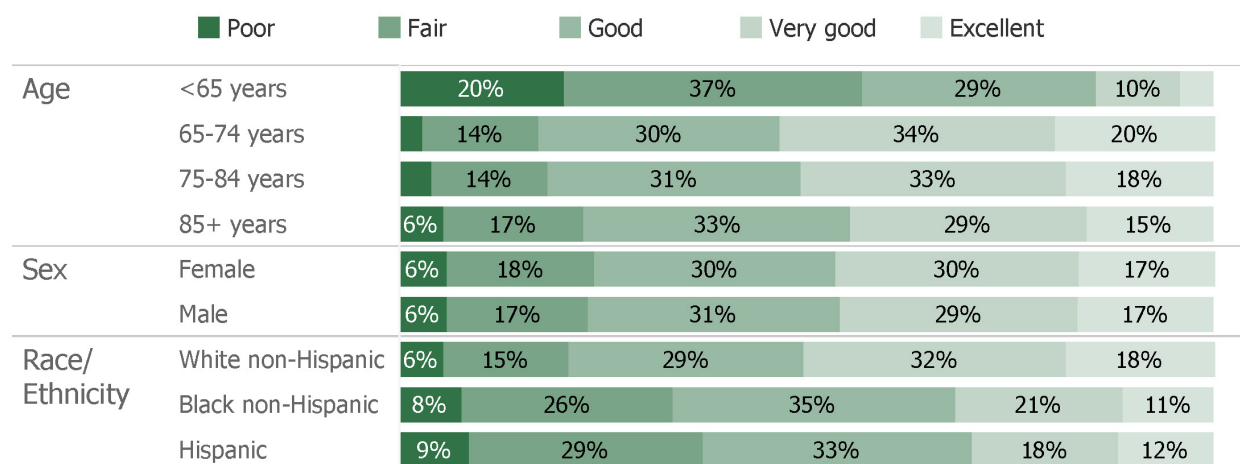
Quality of Life Metrics Among All Medicare Beneficiaries, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. LTC stands for Long-Term Care. "LTC facility" includes beneficiaries who only completed Facility interviews during the year.

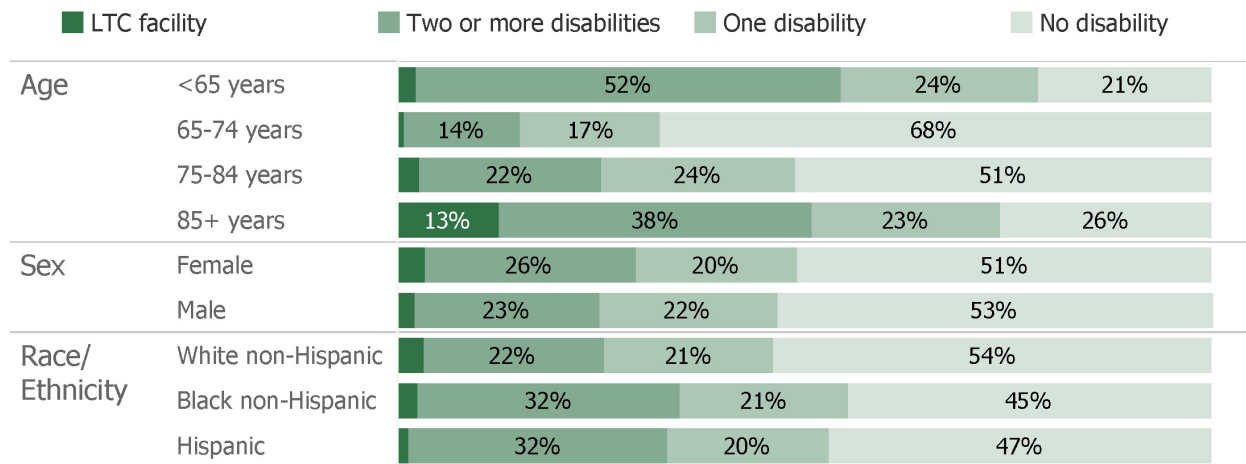
Exhibit 2.2.
**Health Status Among All Medicare Beneficiaries by Age, Sex, and
 Race/Ethnicity, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category.

Exhibit 2.3.
**Disability Status Among All Medicare Beneficiaries by Age, Sex,
 and Race/Ethnicity, 2018**



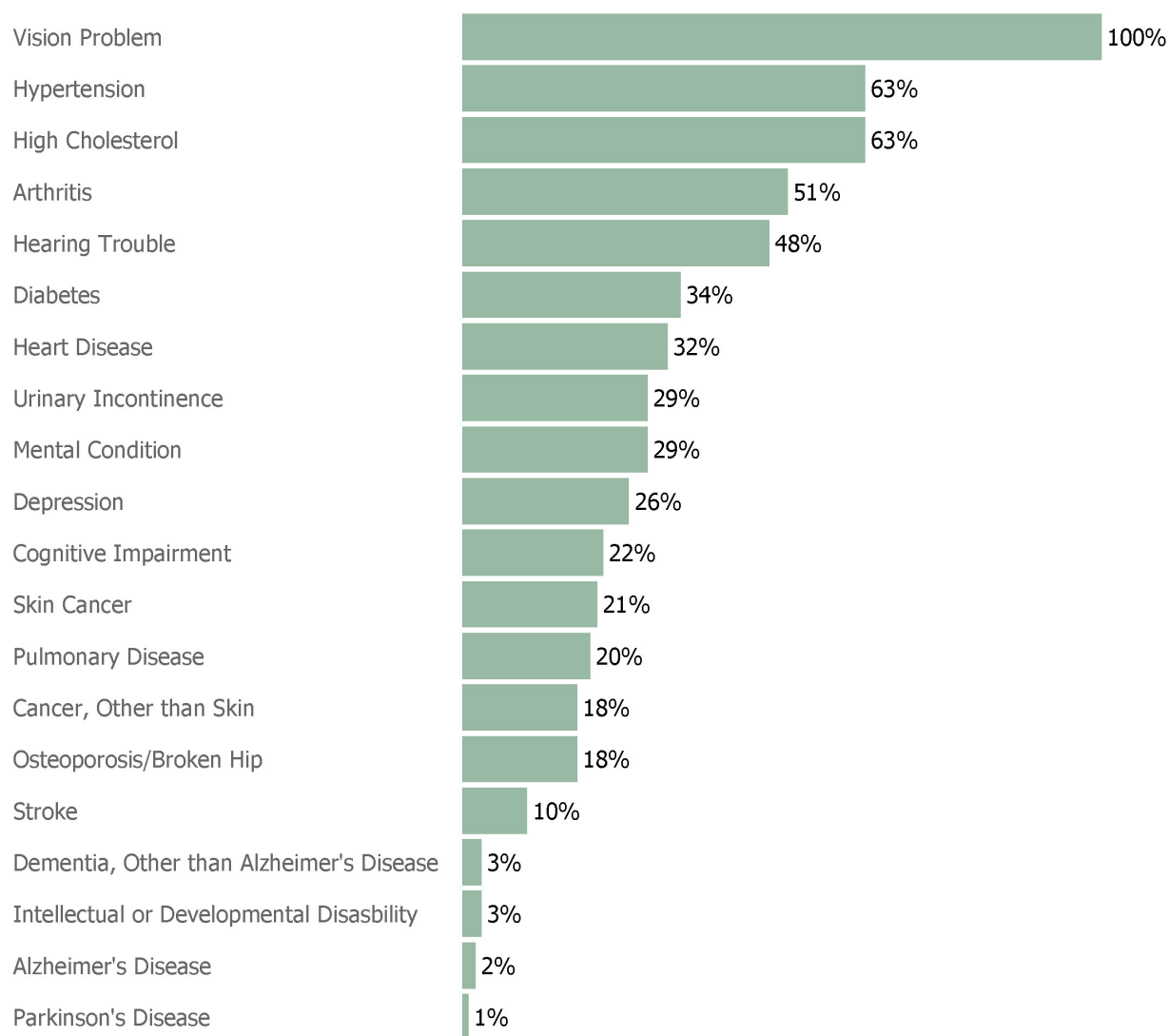
SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category. LTC stands for Long-Term Care. "LTC facility" includes beneficiaries who only completed Facility interviews during the year.

HEALTH CONDITIONS AND RISK FACTORS

The charts in this section show reported chronic conditions and other common health conditions of Medicare beneficiaries, as well as the health behavior risk factors of smoking and alcohol use.

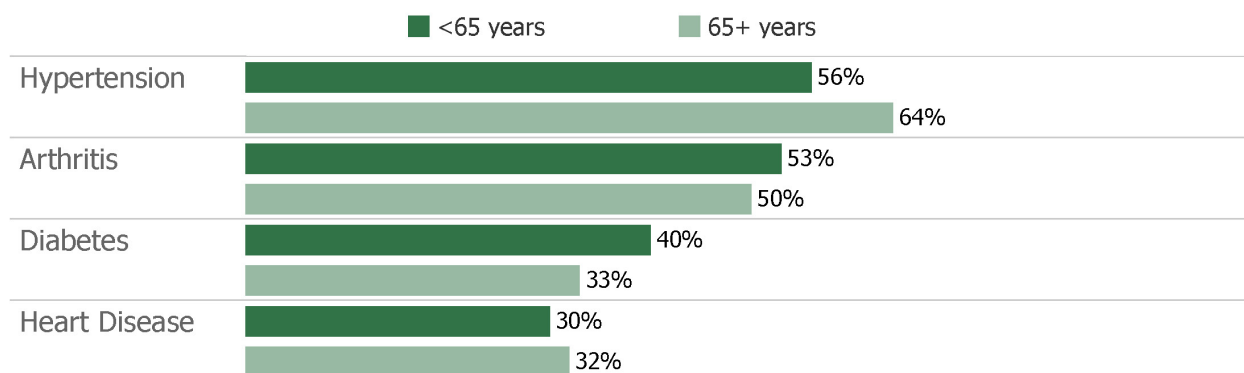
Exhibit 2.4.
Reported Chronic and Other Health Conditions Among All Medicare Beneficiaries, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available.

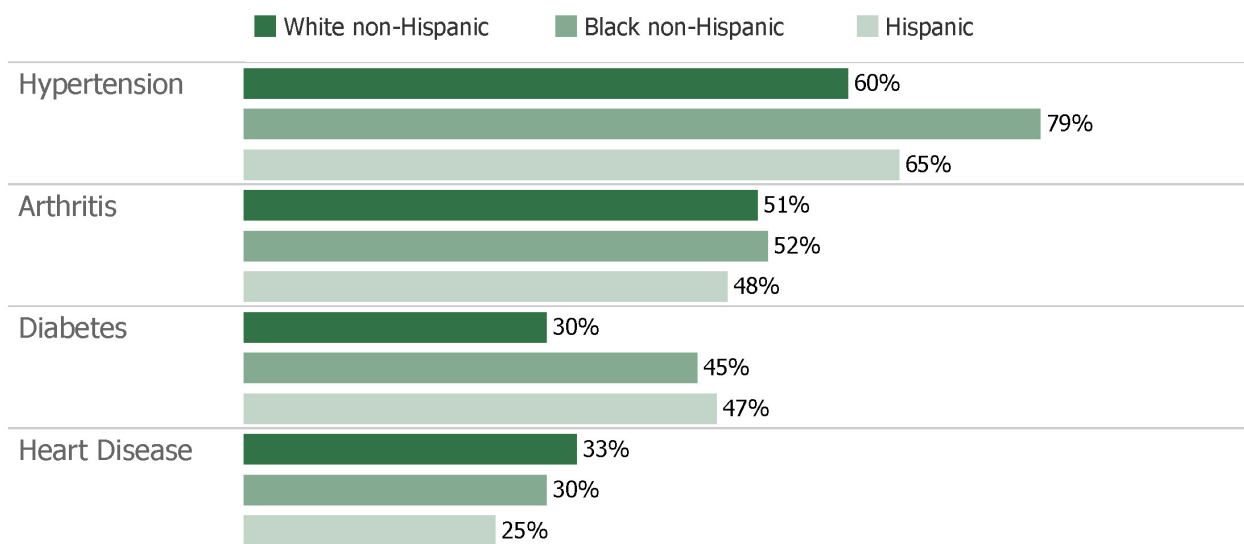
Exhibit 2.5.
Selected Reported Chronic Conditions Among All Medicare Beneficiaries by Age, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available.

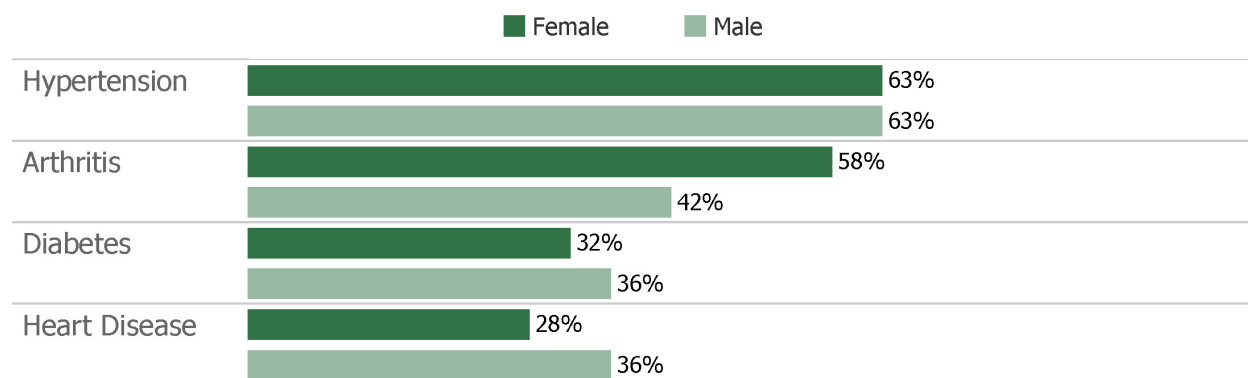
Exhibit 2.6.
Selected Reported Chronic Conditions Among All Medicare Beneficiaries by Race/Ethnicity, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category.

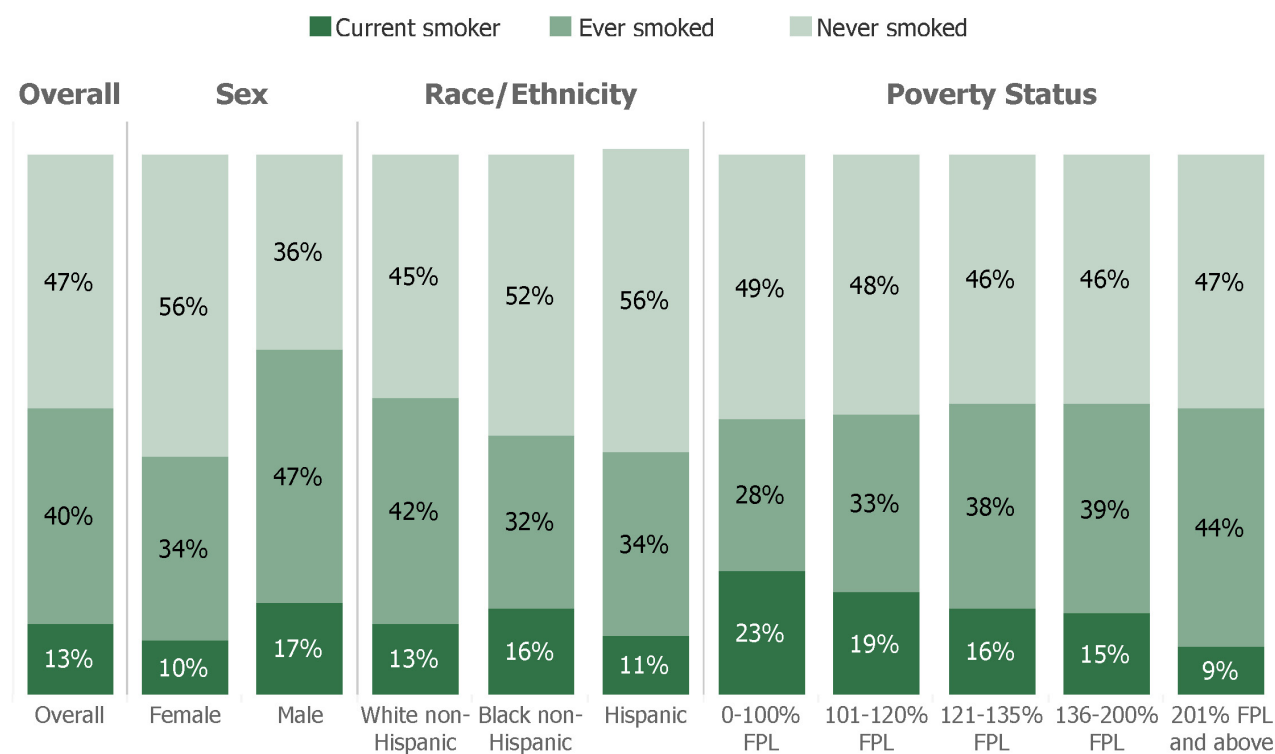
Exhibit 2.7.
**Selected Reported Chronic Conditions Among All Medicare
 Beneficiaries by Sex, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available.

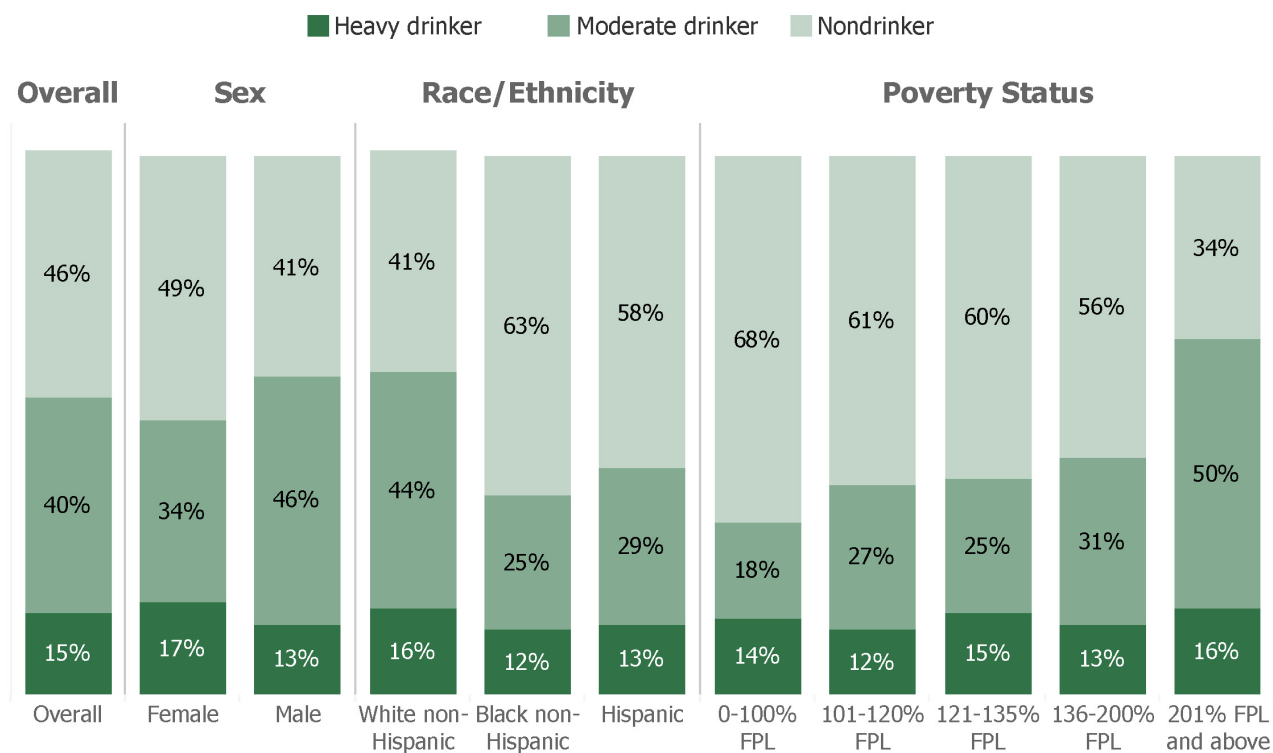
Exhibit 2.8.
**Smoking Status Among All Medicare Beneficiaries Overall and by
 Sex, Race/Ethnicity, and Poverty Status, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category. FPL stands for Federal Poverty Level.

Exhibit 2.9.
**Self-Reported Alcohol Use Among Medicare Beneficiaries Living in
 the Community Overall and by Sex, Race/Ethnicity, and Poverty
 Status, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FPL stands for Federal Poverty Level.

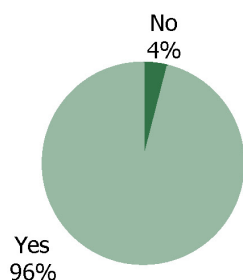
PREVENTIVE CARE

The charts in this section show self-reported preventive health behaviors of Medicare beneficiaries, including vaccination for the flu, pneumonia, and shingles, and blood pressure screening.

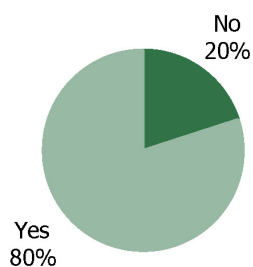
Exhibit 2.10.

Self-Reported Preventive Health Behaviors Among Medicare Beneficiaries Living in the Community, 2018

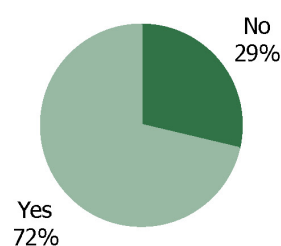
Blood Pressure Screening



Pneumonia Shot



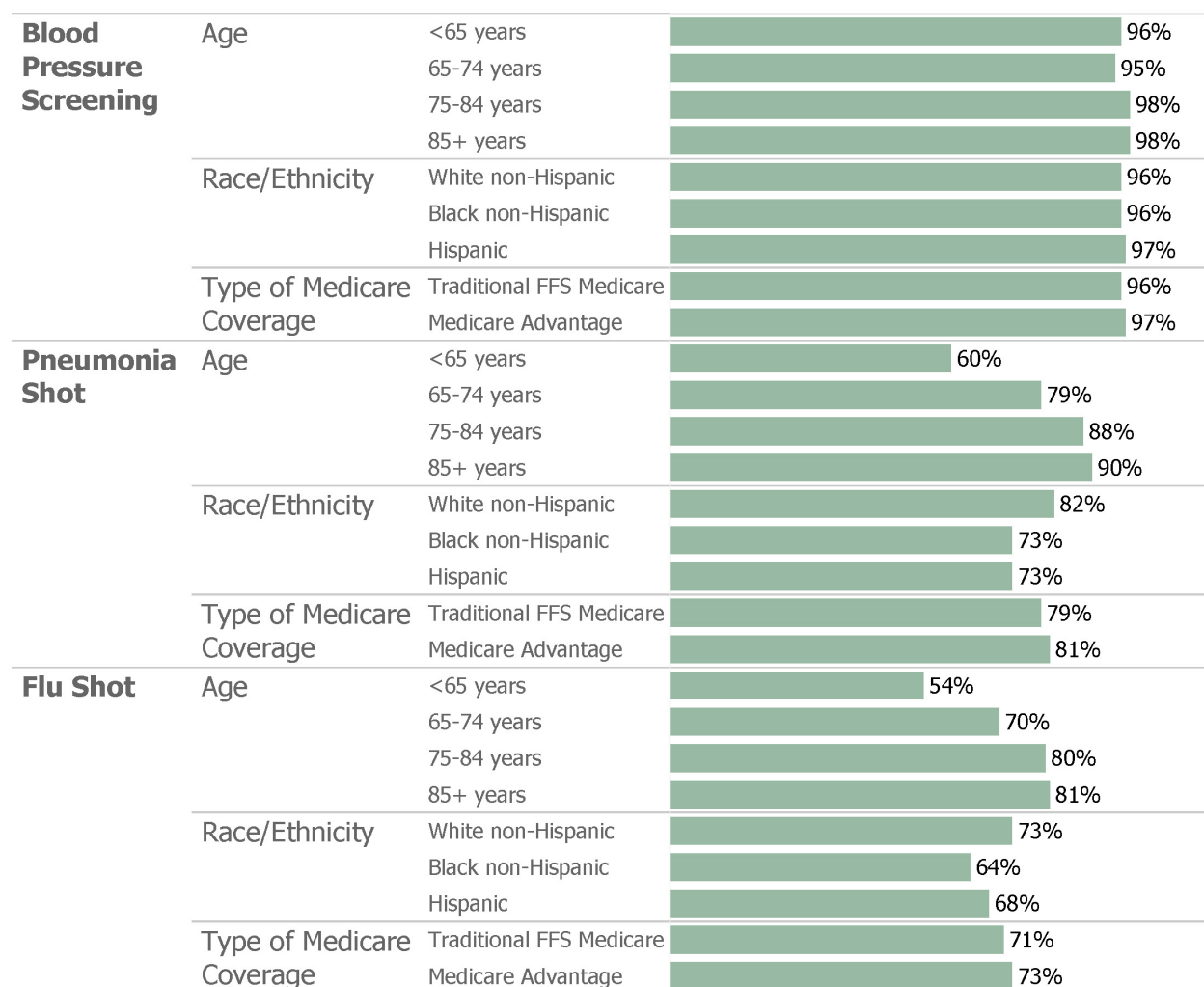
Flu Shot



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Exhibit 2.11.
**Self-Reported Preventive Health Behaviors Among Medicare
 Beneficiaries Living in the Community by Age, Race/Ethnicity, and
 Type of Medicare Coverage, 2018**

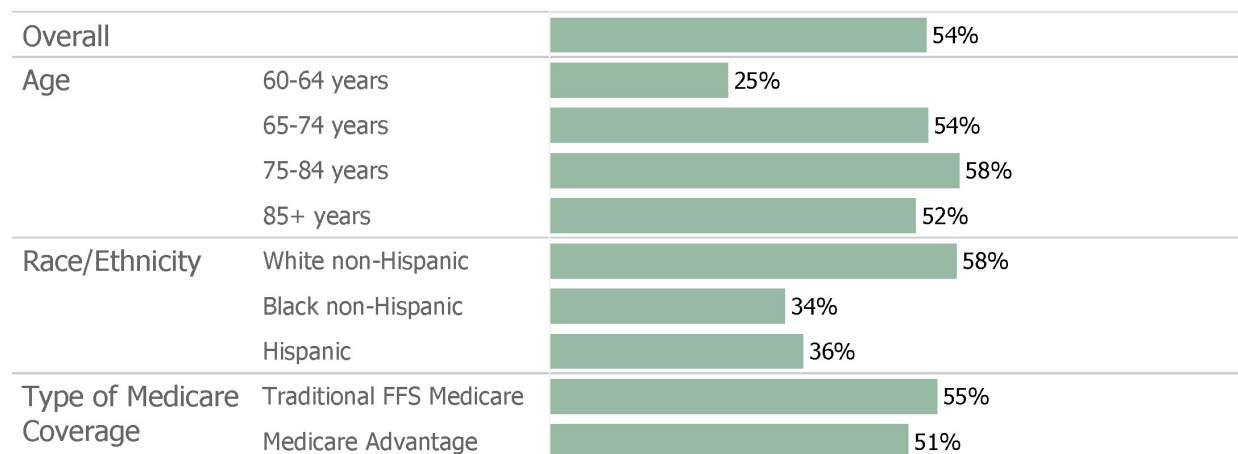


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FFS stands for Fee-for-Service.

Exhibit 2.12.

Self-Reported Receipt of Shingles Vaccine Among Medicare Beneficiaries Aged 60 and Over Living in the Community Overall and by Age, Race/Ethnicity, and Type of Medicare Coverage, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FFS stands for Fee-for-Service.

WHAT IS THE MEDICARE POPULATION'S ACCESS TO CARE AND HOW SATISFIED ARE BENEFICIARIES WITH THEIR CARE?

3. WHAT IS THE MEDICARE POPULATION'S ACCESS TO CARE AND HOW SATISFIED ARE BENEFICIARIES WITH THEIR CARE?

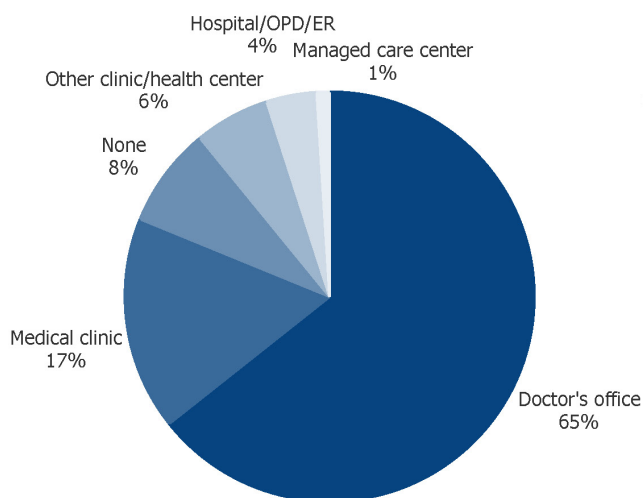
ACCESS TO CARE

The charts in this section show the usual source of care reported by Medicare beneficiaries, as well as their propensity to seek care and satisfaction with care.

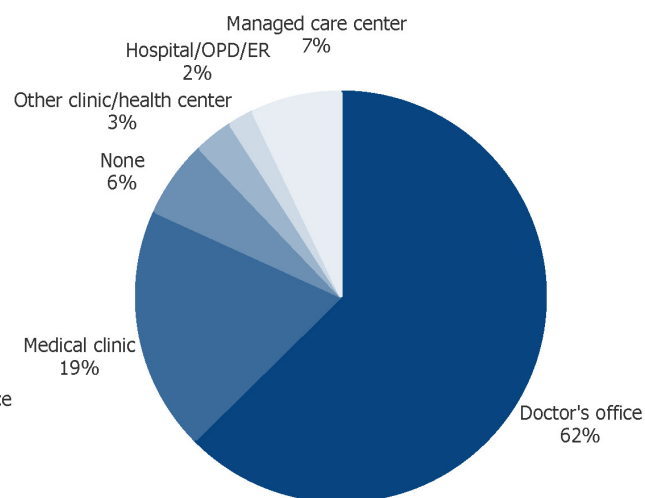
Exhibit 3.1.

Usual Source of Care Among Medicare Beneficiaries Living Only in the Community by Type of Medicare Coverage, 2018

Traditional FFS Medicare



Medicare Advantage



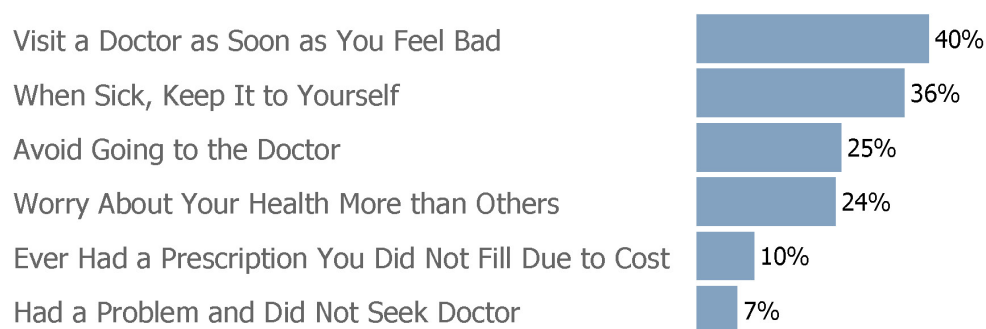
SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. ER stands for Emergency Room. FFS stands for Fee-for-Service. OPD stands for Outpatient Department.

PROPENSITY TO SEEK CARE

The charts in this section show Medicare beneficiaries' self-reported care seeking behaviors. This includes behaviors that increase the propensity to seek care, such as a beneficiary visiting a doctor as soon as they feel bad and worrying about their health more than others, as well as behaviors that decrease this tendency, such as a beneficiary having a problem and not seeking a doctor, having a prescription that they do not fill due to cost, avoiding going to the doctor, and keeping it to themselves when sick.

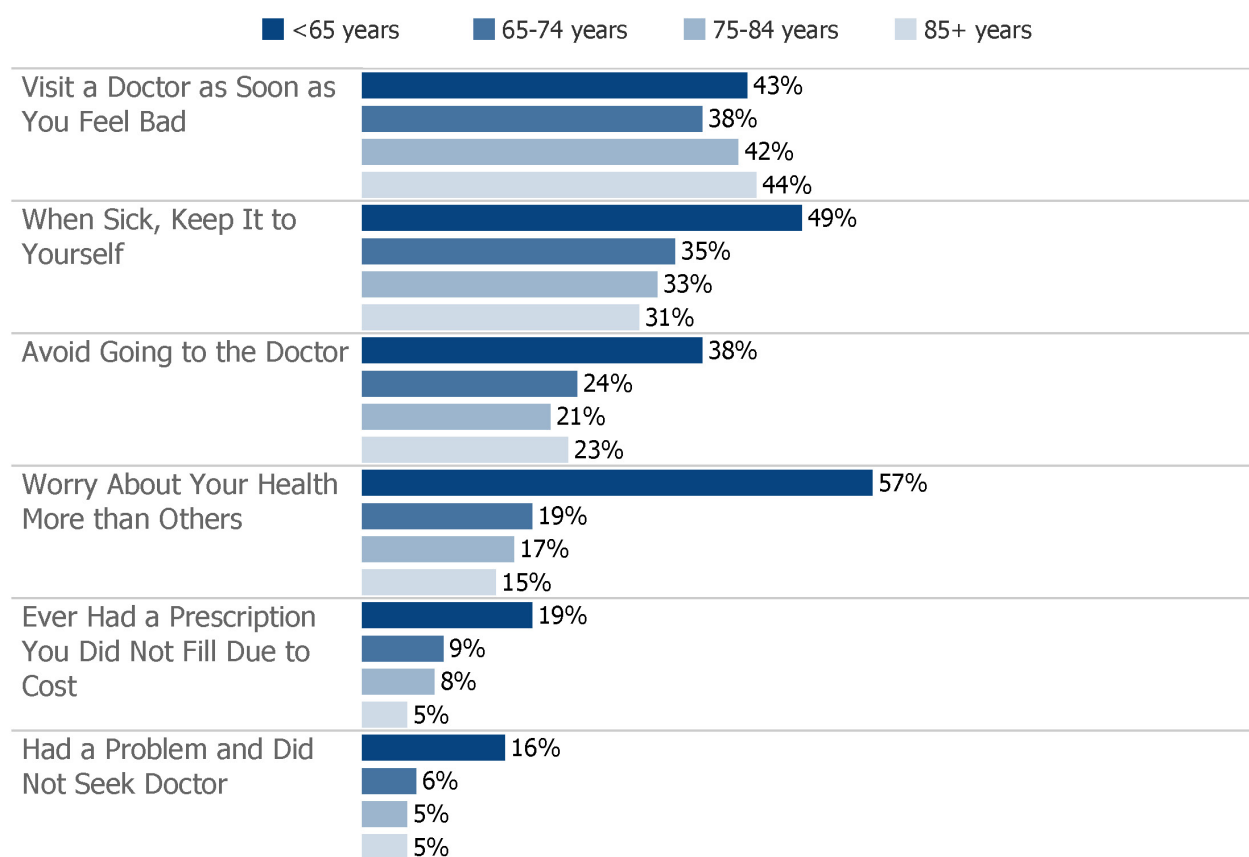
Exhibit 3.2.
Indicators of Propensity to Seek Care Among Medicare Beneficiaries Living Only in the Community, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

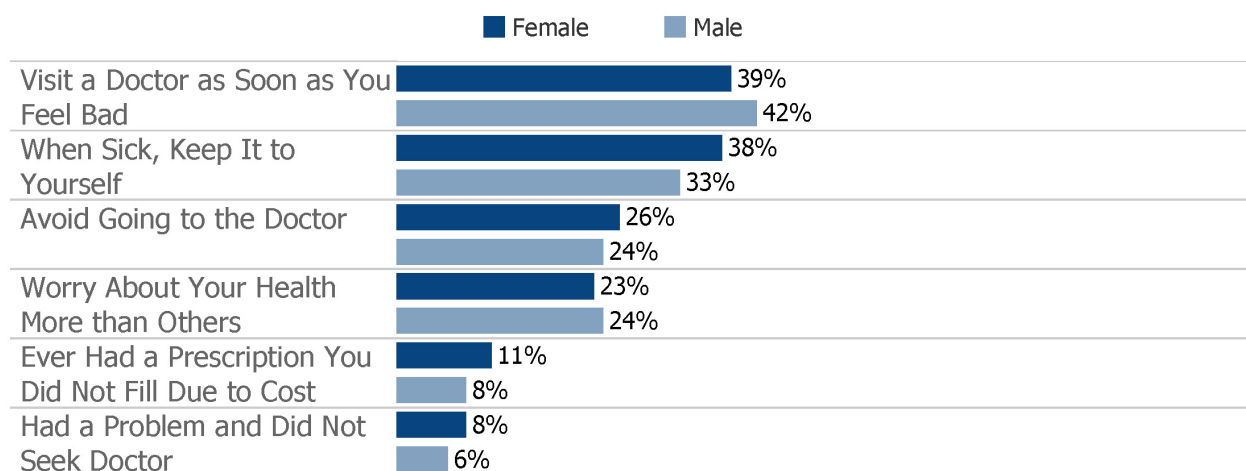
Exhibit 3.3.
**Indicators of Propensity to Seek Care Among Medicare
 Beneficiaries Living Only in the Community by Age, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

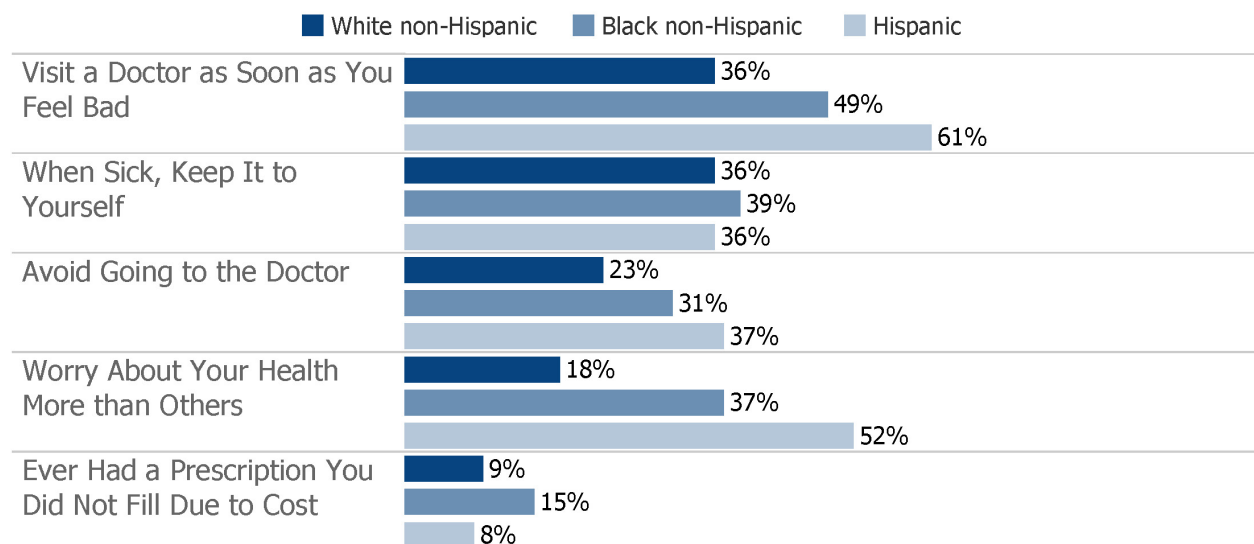
Exhibit 3.4.
**Indicators of Propensity to Seek Care Among Medicare
 Beneficiaries Living Only in the Community by Sex, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Exhibit 3.5.
**Indicators of Propensity to Seek Care Among Medicare
 Beneficiaries Living Only in the Community by Race/Ethnicity,
 2018**



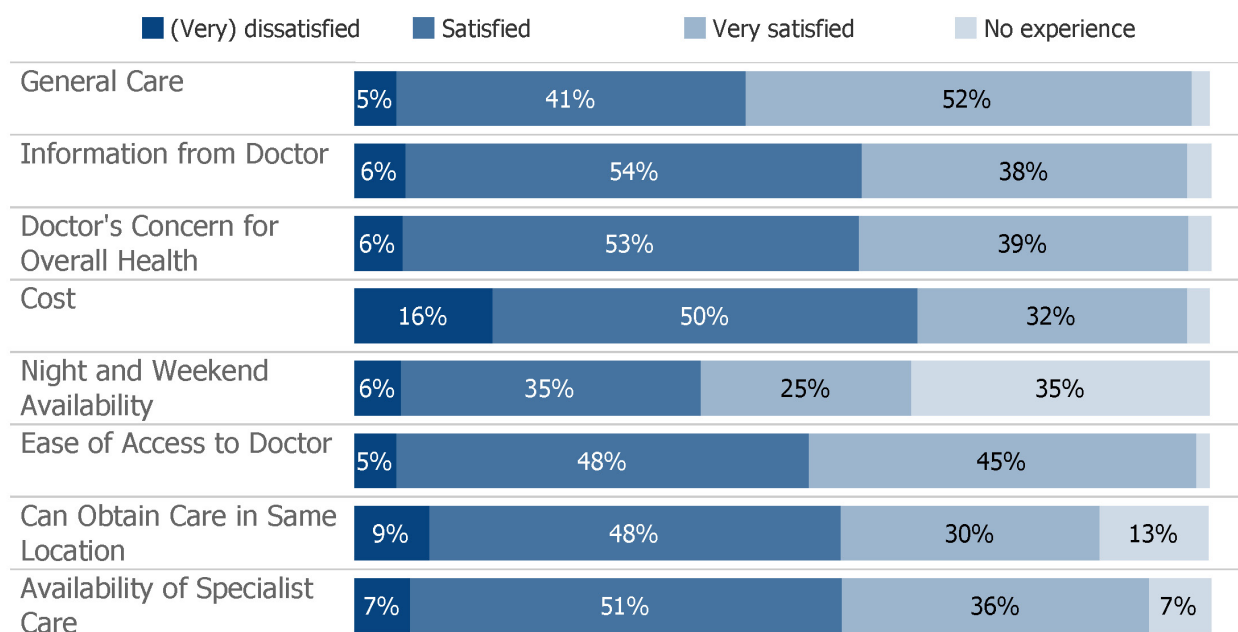
SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. Estimates for "Had a Problem and Did Not Seek Doctor" are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix.

SATISFACTION WITH CARE

The charts in this section show Medicare beneficiaries' satisfaction with the quality of their health care as well as their satisfaction with access to care and the cost of care. Charts on beneficiaries' knowledge of the Medicare Program and their satisfaction with the availability of information about Medicare are also included.

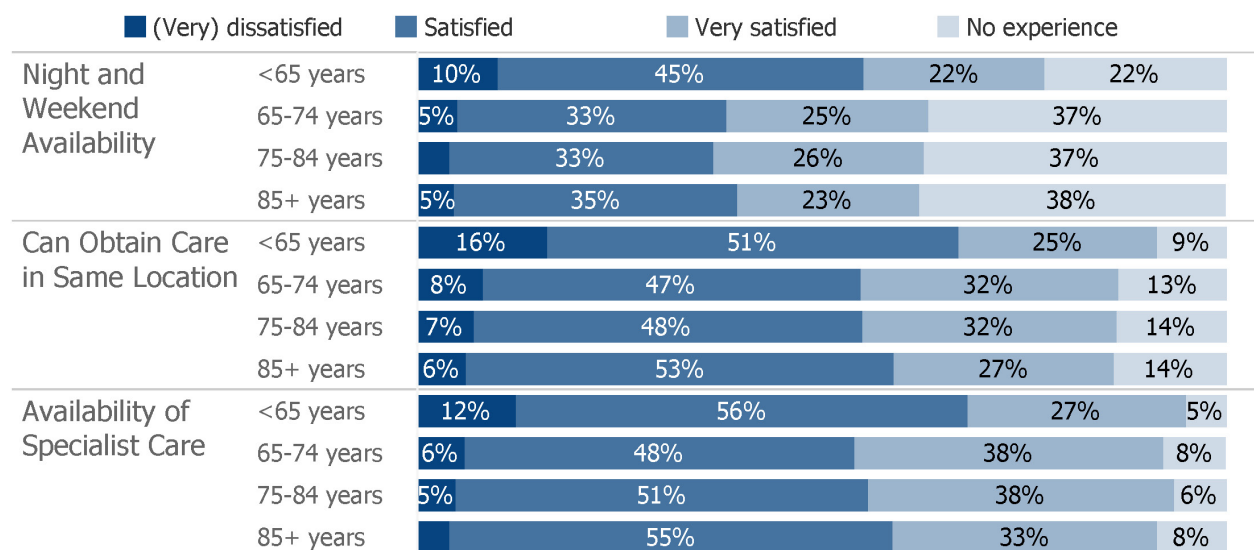
Exhibit 3.6.
**Indicators of Satisfaction with Care Among Medicare Beneficiaries
Living Only in the Community, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. The category "(Very) dissatisfied" includes beneficiaries whose response to the question was "dissatisfied" or "very dissatisfied."

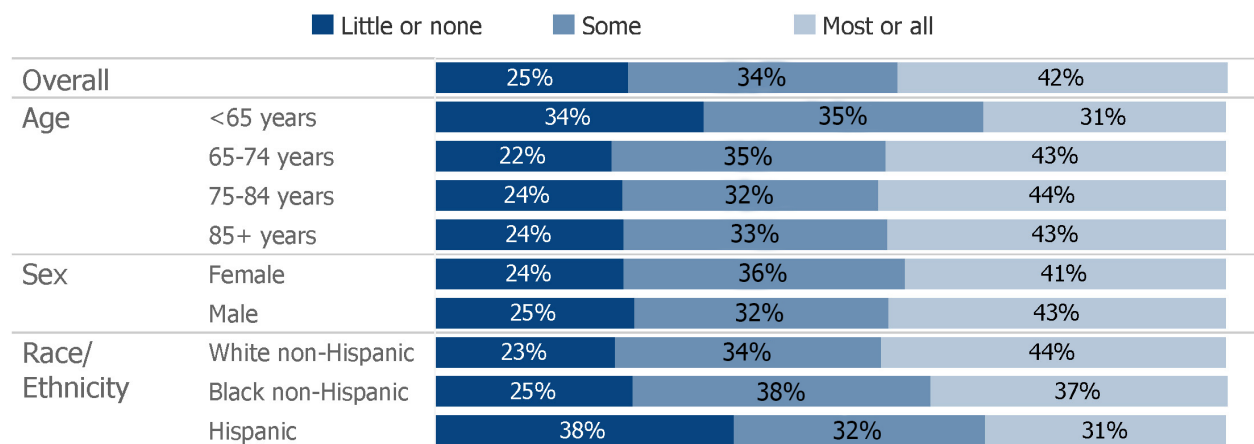
Exhibit 3.7.
Satisfaction with Access to Care Among Medicare Beneficiaries
Living Only in the Community by Age, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. The category "(Very) dissatisfied" includes beneficiaries whose response to the question was "dissatisfied" or "very dissatisfied." Estimates for "Ease of Access to Doctor" are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix.

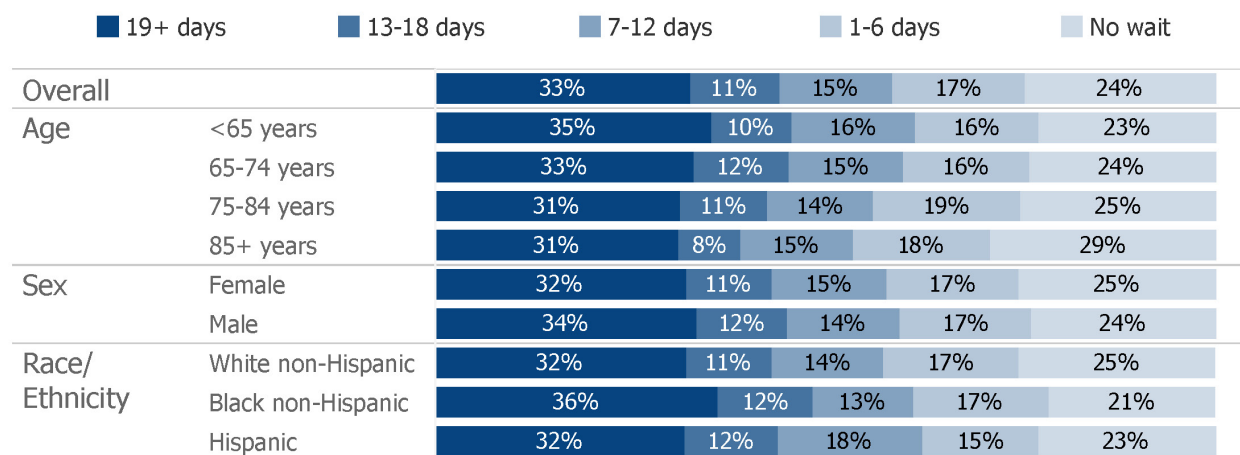
Exhibit 3.8.
**Perceived Knowledge of the Medicare Program Among Medicare
 Beneficiaries Living Only in the Community Overall and by Age,
 Sex, and Race/Ethnicity, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Exhibit 3.9.
**Self-Reported Physician Wait Time Among Medicare Beneficiaries
 Living Only in the Community Overall and by Age, Sex, and
 Race/Ethnicity, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

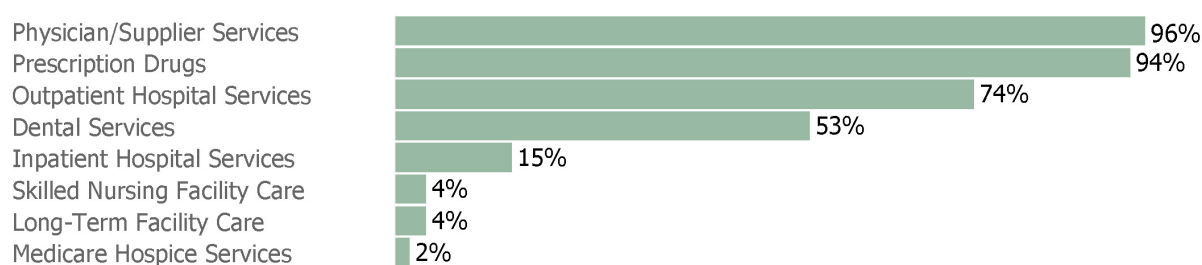
NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

WHAT HEALTH CARE SERVICES DO MEDICARE BENEFICIARIES RECEIVE?

4. WHAT HEALTH CARE SERVICES DO MEDICARE BENEFICIARIES RECEIVE?

The charts in Section 4 present information about service utilization by Medicare beneficiaries. This section presents information about user rates of dental, inpatient hospital, long-term facility care, Medicare home health, Medicare hospice, outpatient hospital, physician/supplier, and skilled nursing facility care services, as well as use of prescription drugs.

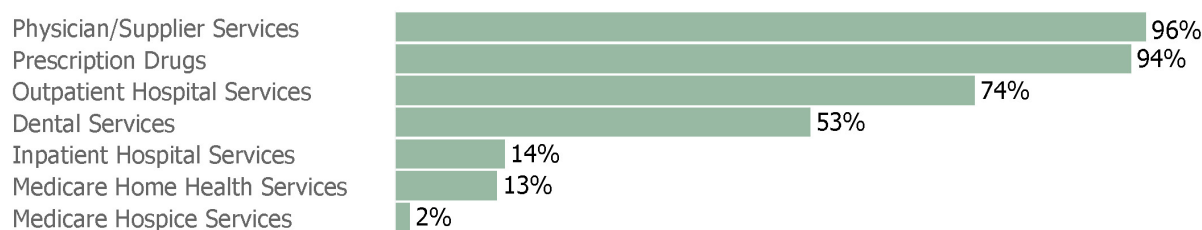
Exhibit 4.1.
User Rates of Health Care Services Among All Medicare Beneficiaries, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Home Health Services are only presented in the Chartbook for beneficiaries who completed at least one Community interview during the year and are therefore excluded from this Exhibit.

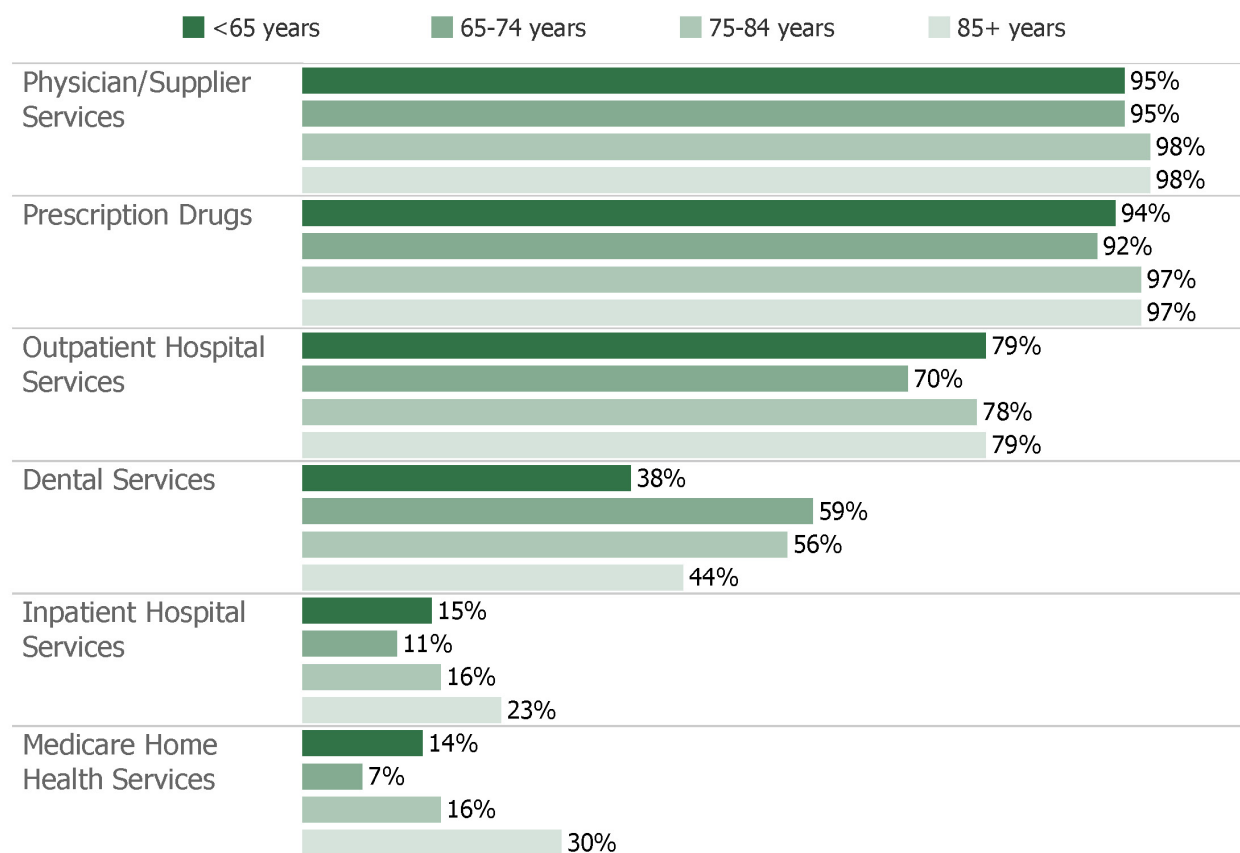
Exhibit 4.2.
User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

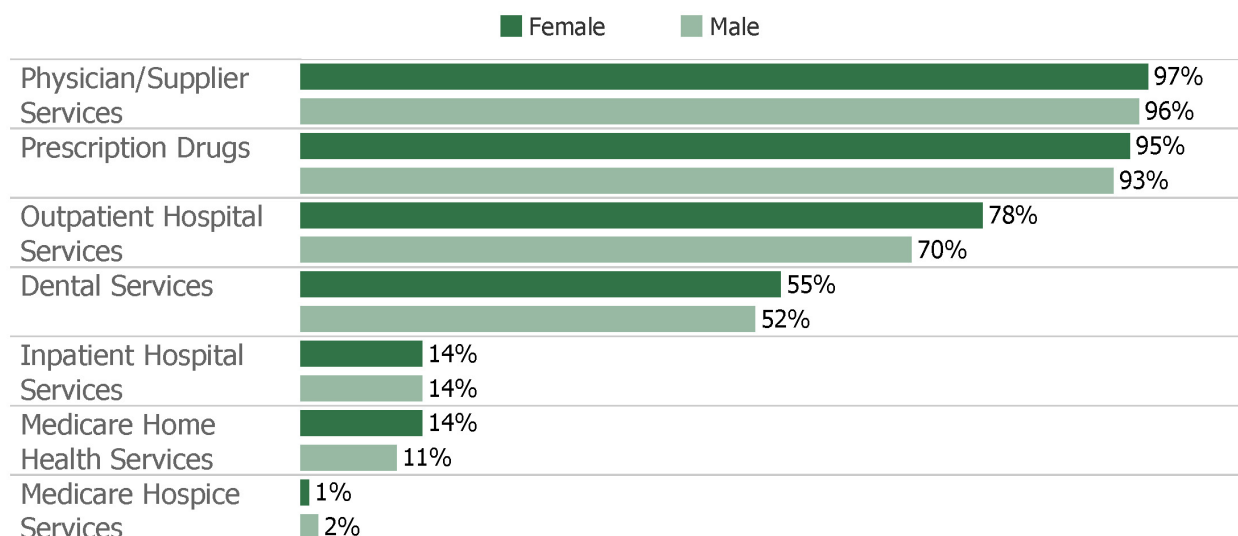
Exhibit 4.3.
**User Rates of Selected Health Care Services Among Medicare
 Beneficiaries Living Only in the Community by Age, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Hospice Services are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix.

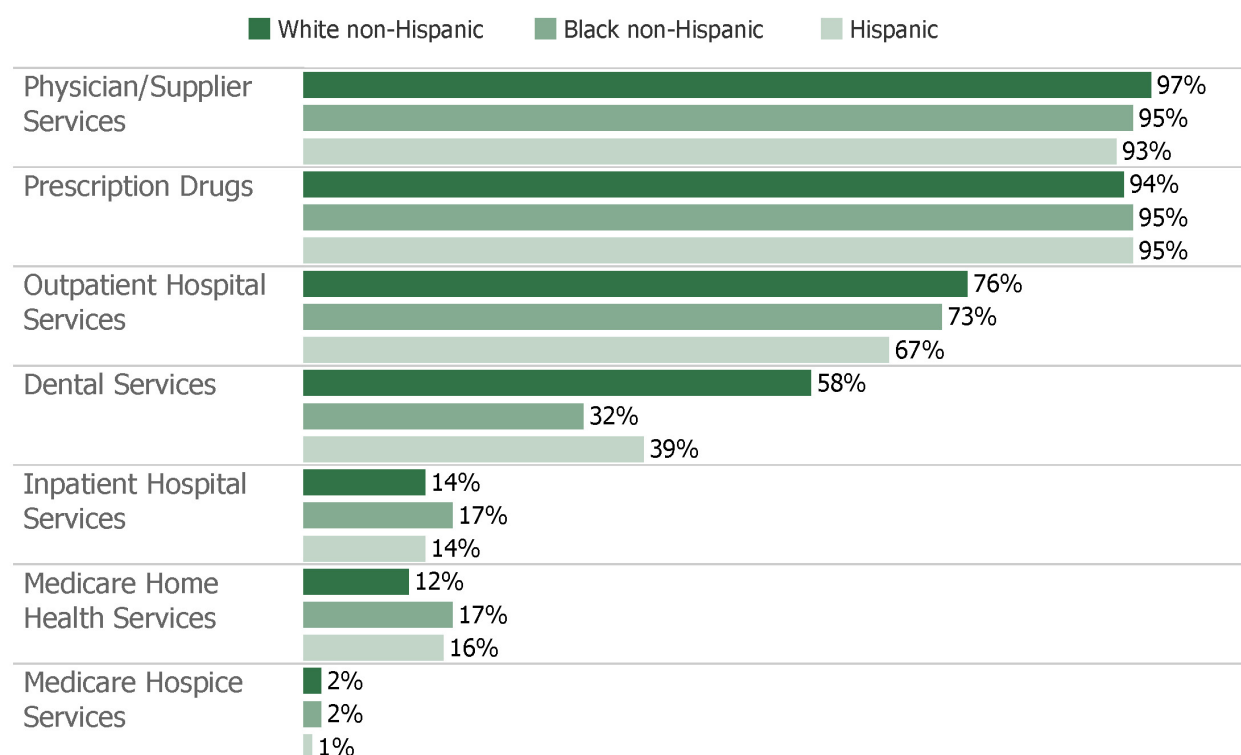
Exhibit 4.4.
User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community by Sex, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Exhibit 4.5.
**User Rates of Selected Health Care Services Among Medicare
 Beneficiaries Living Only in the Community by Race/Ethnicity,
 2018**

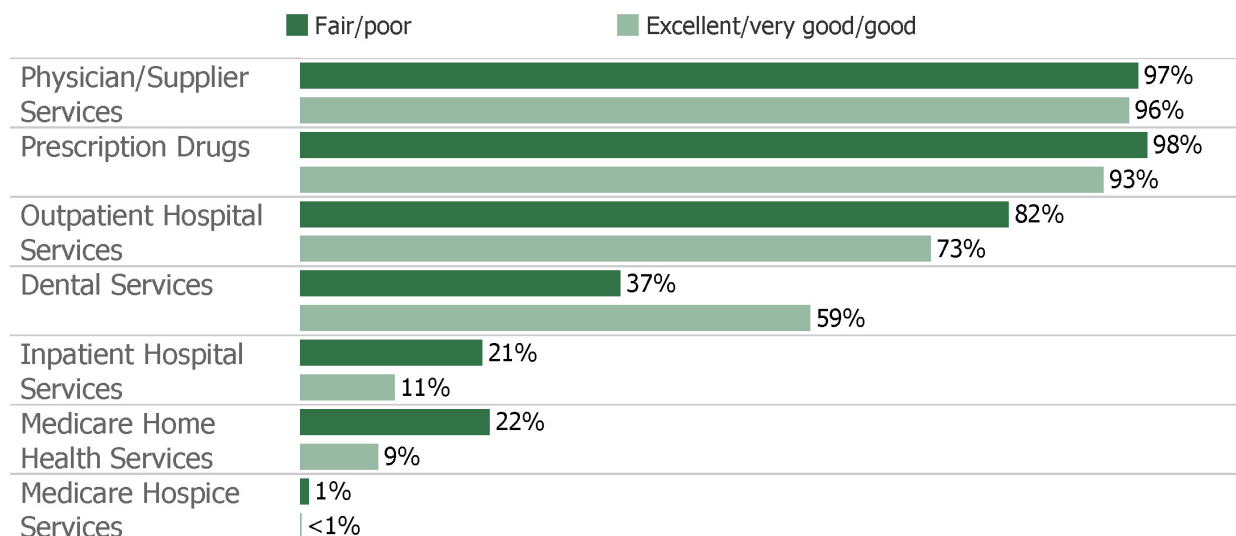


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Exhibit 4.6.

User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community by Self-Reported Health Status, 2018

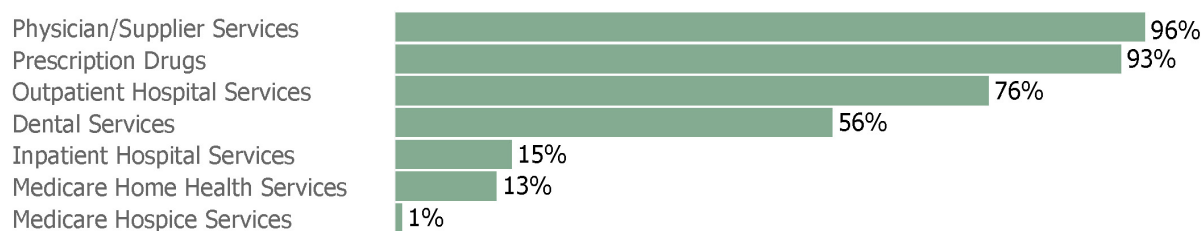


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Exhibit 4.7.

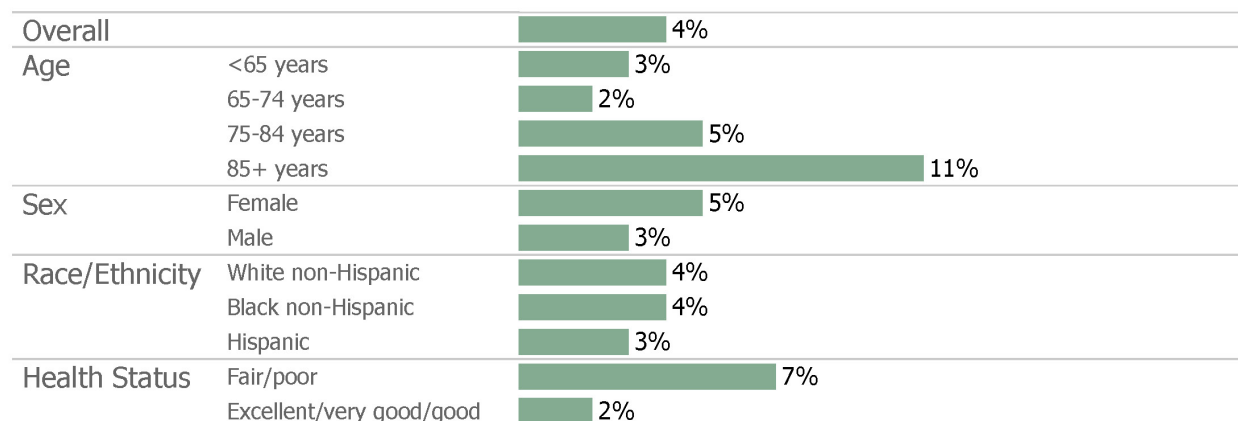
User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community with Fee-for-Service Coverage, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews and had Medicare Fee-for-Service coverage. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

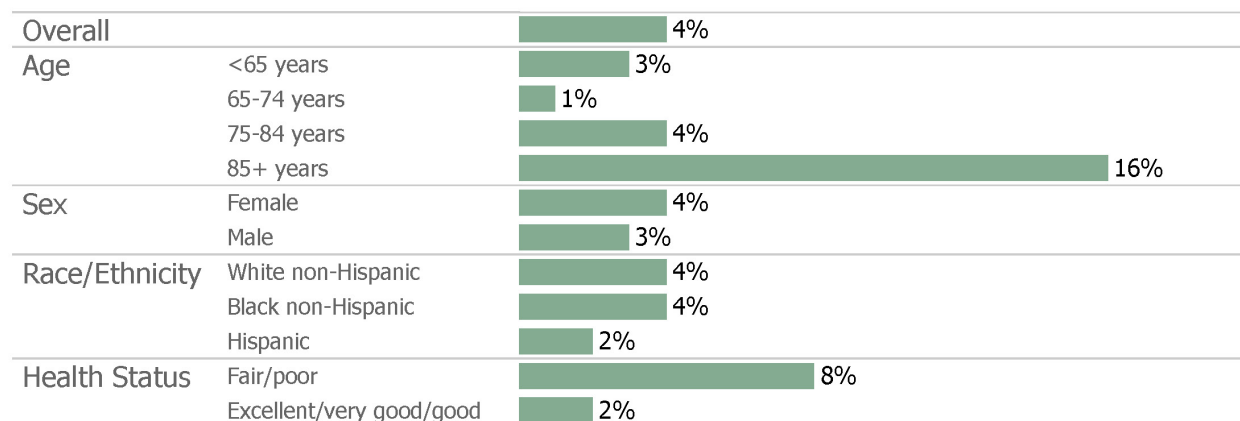
Exhibit 4.8.
User Rates of Skilled Nursing Facility Care Among All Medicare Beneficiaries Overall and by Age, Sex, Race/Ethnicity, and Health Status, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Exhibit 4.9.
User Rates of Long-Term Facility Care Among All Medicare Beneficiaries Overall and by Age, Sex, Race/Ethnicity, and Health Status, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

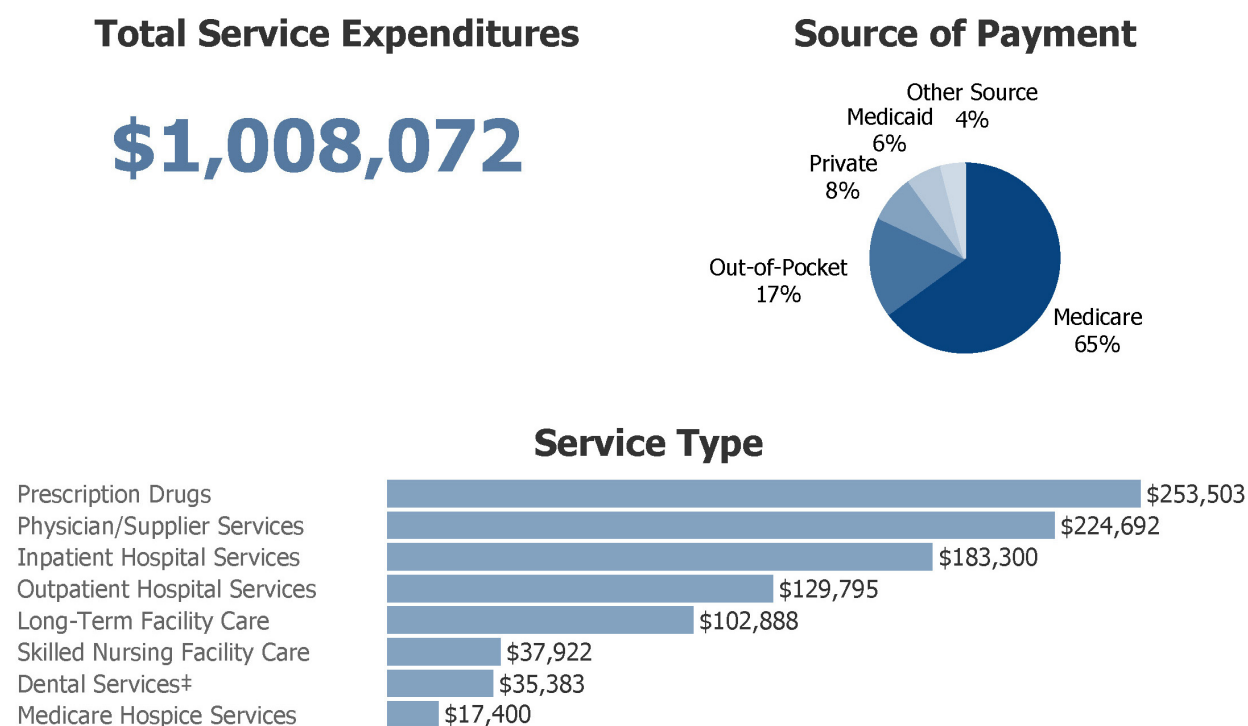
HOW MUCH DO HEALTH CARE SERVICES FOR THE MEDICARE POPULATION COST?

5. HOW MUCH DO HEALTH CARE SERVICES FOR THE MEDICARE POPULATION COST?

The charts in Section 5 present information about expenditures on services and insurance premiums for Medicare beneficiaries. This section presents information about overall spending, source of payment, spending per capita, and out-of-pocket spending per capita for dental, inpatient hospital, long-term facility care, Medicare home health, Medicare hospice, outpatient hospital, physician/supplier, and skilled nursing facility care services, as well as spending on prescription drugs and Medicare premiums.

Exhibit 5.1.

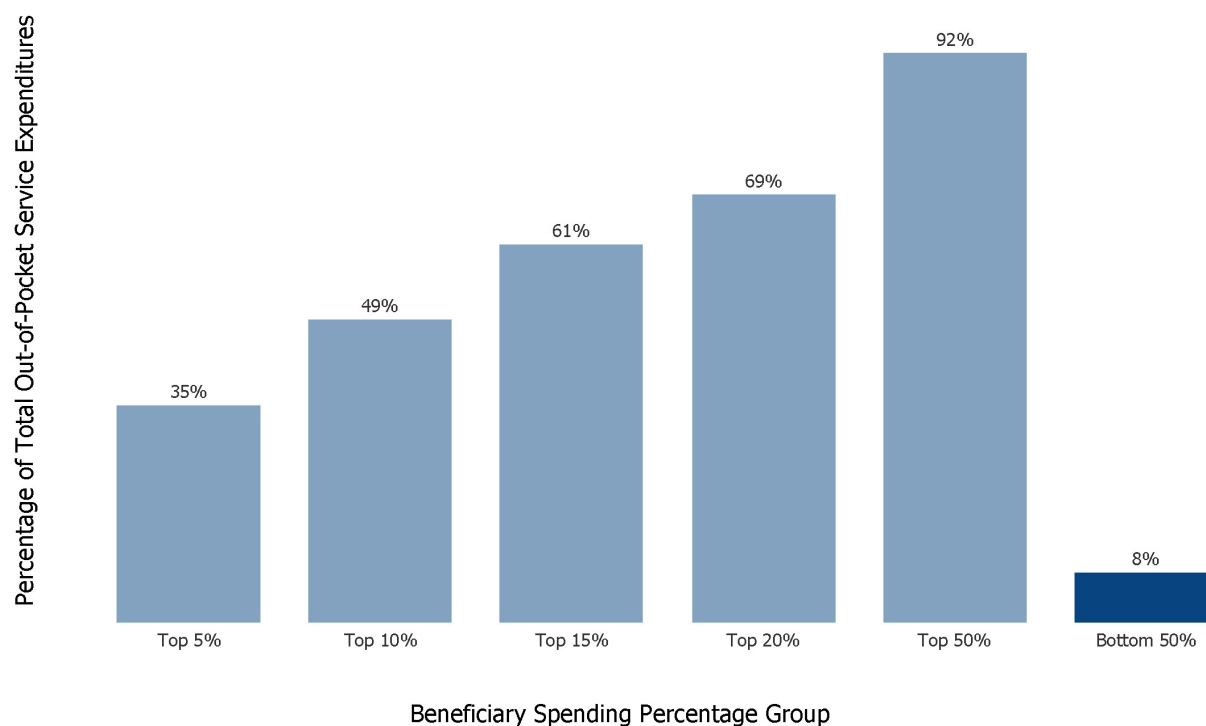
Total Health Care Service Expenditures Among All Medicare Beneficiaries Overall, by Source of Payment, and for Selected Service Types, in Millions of Dollars, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost Supplement File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. †Dental services expenditures are only available for those who completed at least one Community interview in the year. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources. Estimates for Medicare Home Health Services are only presented in the Chartbook for beneficiaries who completed at least one Community interview during the year and are therefore excluded from this Exhibit.

Exhibit 5.2.
Distribution of Total Out-of-Pocket Health Care Service Expenditures Among All Medicare Beneficiaries, 2018

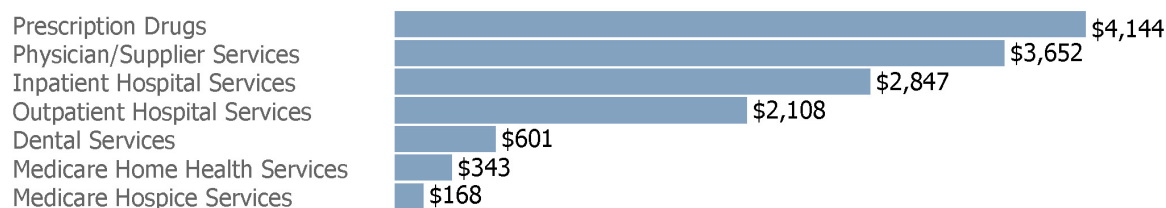


- The 5% of beneficiaries who spend the most out-of-pocket for health care services account for 35% of all out-of-pocket health care service spending.
- The 50% who spend the least account for 8% of total out-of-pocket health care service spending.

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost Supplement File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

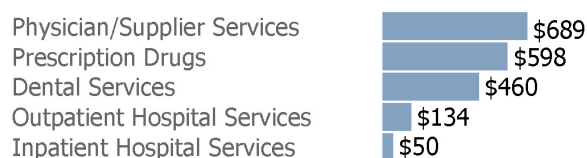
Exhibit 5.3.
**Total Health Care Service Expenditures per Capita for Selected
 Service Types Among Medicare Beneficiaries Living Only in the
 Community, in Dollars, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

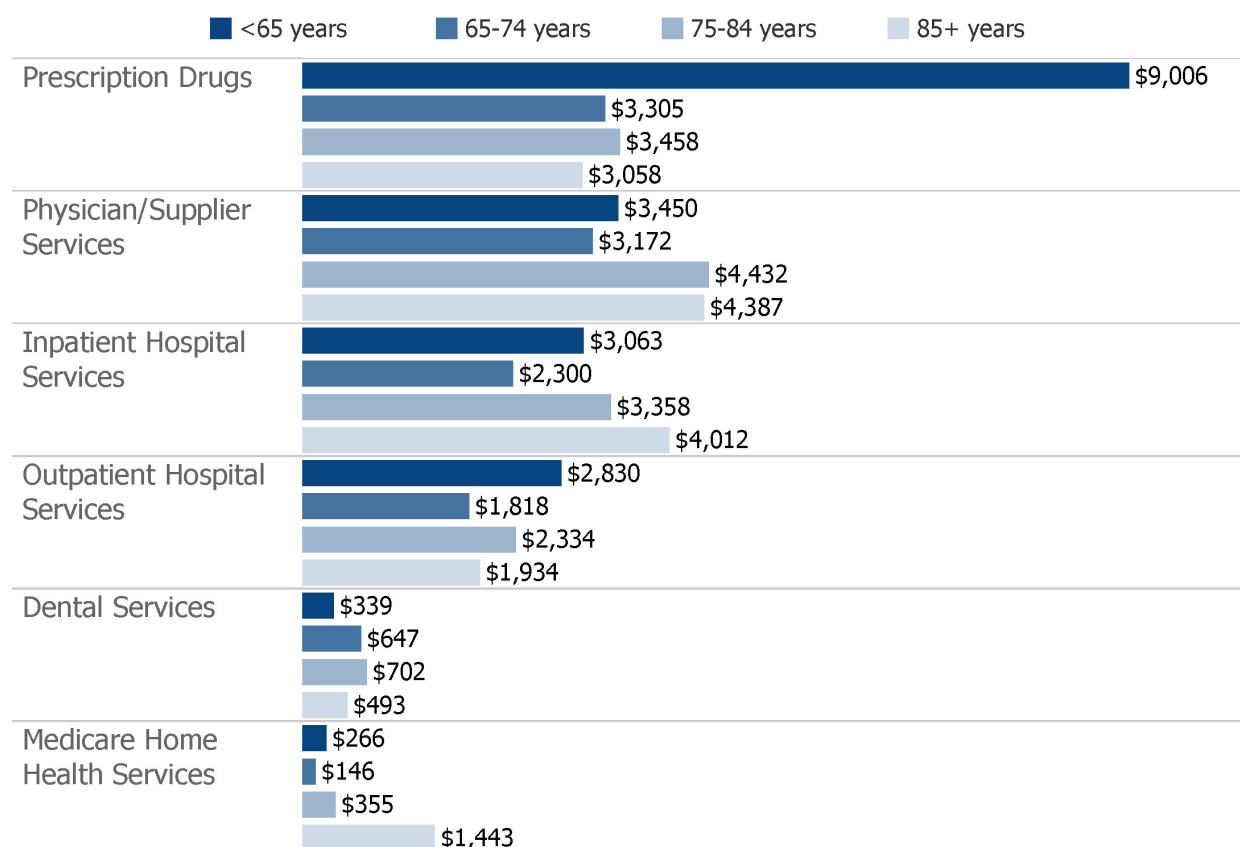
Exhibit 5.4.
**Total Out-of-Pocket Health Care Service Expenditures per Capita
 for Selected Service Types Among Medicare Beneficiaries Living
 Only in the Community, in Dollars, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Home Health Services and Medicare Hospice Services are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix.

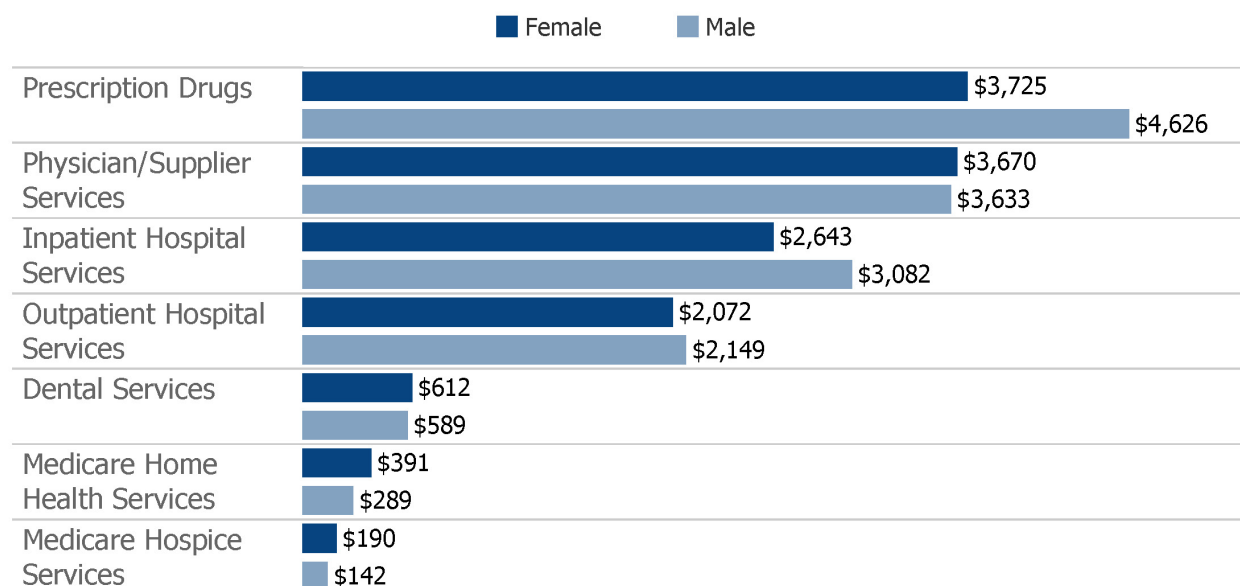
Exhibit 5.5.
**Total Health Care Service Expenditures per Capita for Selected
 Service Types Among Medicare Beneficiaries Living Only in the
 Community by Age, in Dollars, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Hospice Services are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

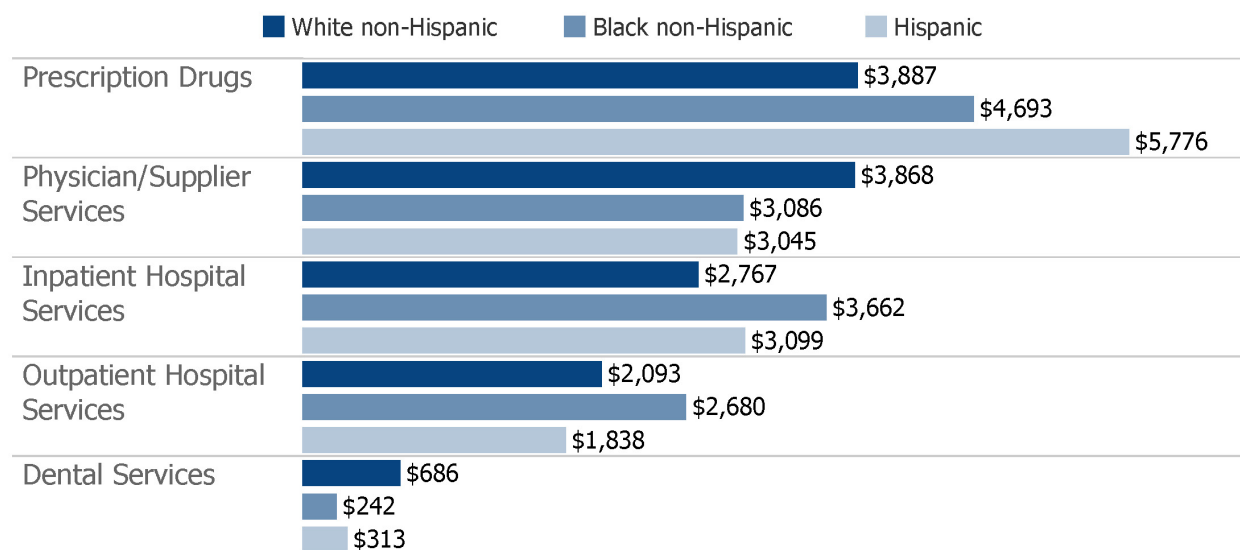
Exhibit 5.6.
**Total Health Care Service Expenditures per Capita for Selected
 Service Types Among Medicare Beneficiaries Living Only in the
 Community by Sex, in Dollars, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

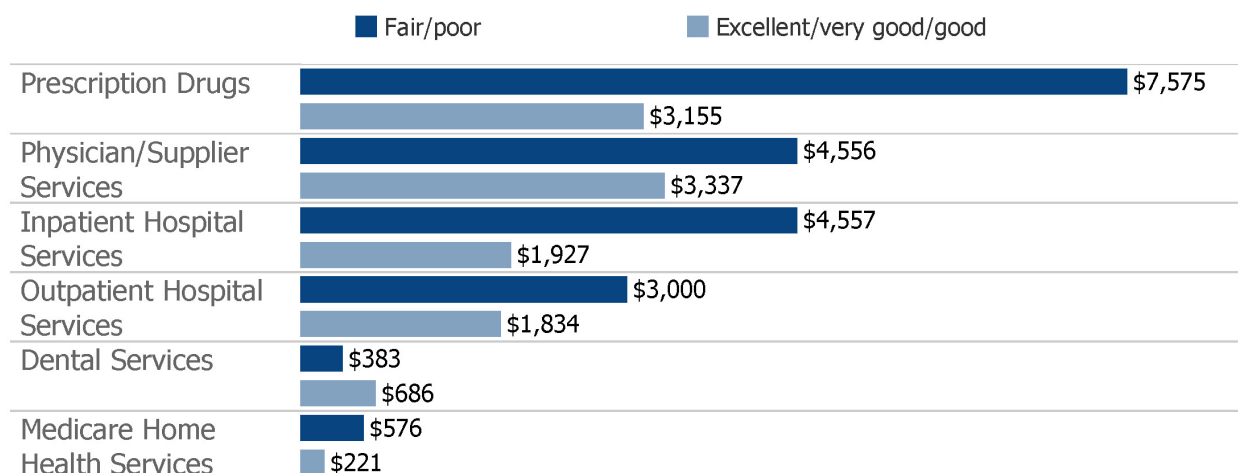
Exhibit 5.7.
**Total Health Care Service Expenditures per Capita for Selected
 Service Types Among Medicare Beneficiaries Living Only in the
 Community by Race/Ethnicity, in Dollars, 2018**



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Home Health Services and Medicare Hospice Services are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Exhibit 5.8.
**Total Health Care Service Expenditures per Capita for Selected
 Service Types Among Medicare Beneficiaries Living Only in the
 Community by Self-Reported Health Status, in Dollars, 2018**

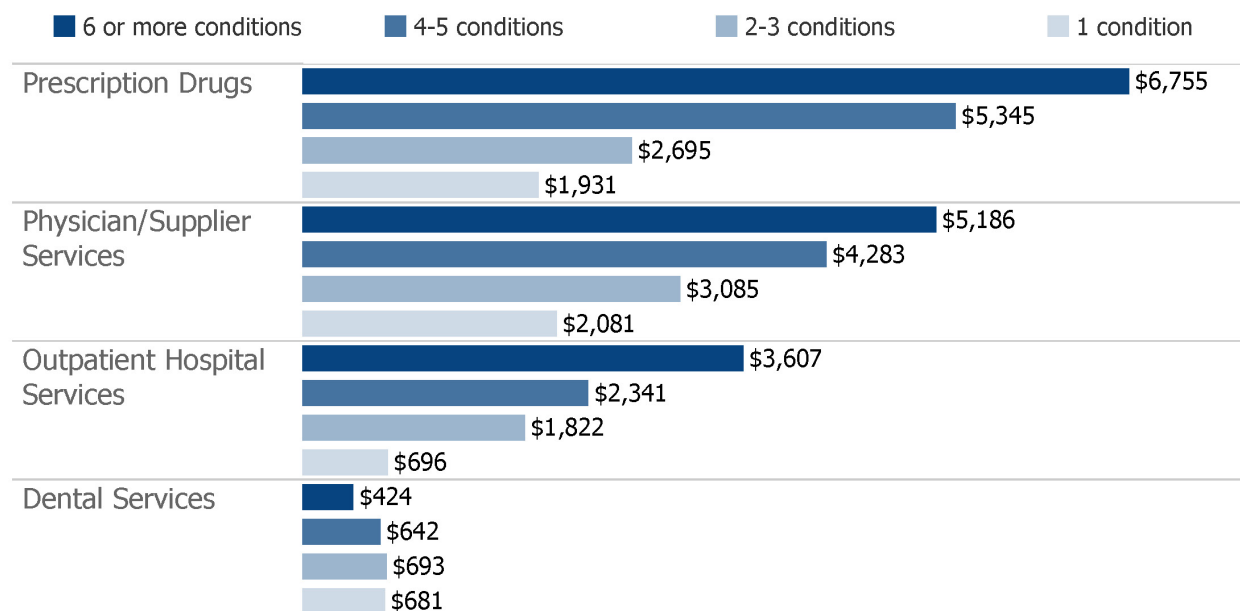


SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Hospice Services are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Exhibit 5.9.

Total Out-of-Pocket Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community with at Least One Chronic Condition by Number of Chronic Conditions, in Dollars, 2018



SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Inpatient Hospital Services, Medicare Home Health Services, and Medicare Hospice Services are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix.

Exhibit 5.10.

Skilled Nursing Facility Care Health Care Service Expenditures per User Overall and by Sex and Health Status, in Dollars, 2018

| | | |
|---------------|--------------------------|----------|
| Overall | | \$15,364 |
| Sex | Female | \$16,287 |
| | Male | \$13,691 |
| Health Status | Fair/poor | \$16,818 |
| | Excellent/very good/good | \$13,846 |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for age and race/ethnicity are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Exhibit 5.11.

Long-Term Facility Care Health Care Service Expenditures per User Overall and by Age, Sex, and Health Status, in Dollars, 2018

| | | |
|---------------|--------------------------|----------|
| Overall | | \$45,786 |
| Age | <65 years | \$46,649 |
| | 65-74 years | \$49,179 |
| | 75-84 years | \$44,675 |
| | 85+ years | \$45,200 |
| | | |
| Sex | Female | \$48,501 |
| | Male | \$40,820 |
| Health Status | Fair/poor | \$55,266 |
| | Excellent/very good/good | \$49,841 |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for race/ethnicity are not presented due to suppression. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Exhibit 5.12.

Total Out-of-Pocket Health Care Service Expenditures per User for Long-Term Facility Care and Skilled Nursing Facility Care, in Dollars, 2018

| | |
|-------------------------------|----------|
| Long-Term Facility Care | \$21,315 |
| Skilled Nursing Facility Care | \$1,672 |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Exhibit 5.13.

Total Health Care Service Expenditures per User for Long-Term Facility Care and Skilled Nursing Facility Care, in Dollars, 2018

| | |
|-------------------------------|----------|
| Long-Term Facility Care | \$45,786 |
| Skilled Nursing Facility Care | \$15,364 |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Exhibit 5.14.
**Annual Out-of-Pocket Medicare Premium Expenditures per Capita
Among Medicare Beneficiaries Who Are Not Dual Eligible Overall
and by Age, Type of Medicare Coverage, and Health Status, in
Dollars, 2018**

| | | |
|---------------------------|--------------------------|---------|
| Overall | | \$1,852 |
| Age | <65 years | \$1,477 |
| | 65-74 years | \$1,814 |
| | 75-84 years | \$1,991 |
| | 85+ years | \$1,970 |
| Type of Medicare Coverage | Traditional FFS Medicare | \$1,785 |
| | Medicare Advantage | \$1,975 |
| Health Status | Poor | \$1,859 |
| | Fair | \$1,794 |
| | Good | \$1,843 |
| | Very good | \$1,889 |
| | Excellent | \$1,939 |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: See the Detailed Tables for complete point estimates and standard errors in the Exhibit. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who are not dual eligible for both Medicare and Medicaid. Beneficiaries who are classified as dual eligible can be either partial- or full-benefit dual eligible. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. FFS stands for Fee-for-Service.

DETAILED TABLES

DETAILED TABLES

Table S.1.a. Language Other than English Spoken at Home Among Medicare Beneficiaries Living Only in the Community, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|---|------------------|--------------------------|
| Language Other than English Spoken at Home | Yes | 12.2 (0.8) |
| | No | 87.8 (0.8) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table S.1.b. Preferred Language for Medical Care Among Medicare Beneficiaries Living Only in the Community Who Speak a Language Other than English at Home and Have a Usual Doctor or Clinic Where They Receive Care, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|--|--|--------------------------|
| Preferred Language for Medical Care | English | 49.8 (1.5) |
| | Language Other than English Spoken at Home | 40.3 (1.6) |
| | Both English and Language Spoken at Home | 9.2 (1.0) |
| | | |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. An estimate is not presented for the "Other" category of Preferred Language for Medical Care, although it is included in the denominator.

Table S.2. Problem Understanding a Medical Situation Due to a Language Barrier Among Medicare Beneficiaries Living Only in the Community Who Self-Reported Limited English Proficiency and Speak a Language Other than English at Home, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|--|------------------|--------------------------|
| Problem Understanding a Medical Situation Due to a Language Barrier | Yes | 12.9 (1.9) |
| | No | 87.1 (1.9) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table S.3. Persons Who Provide Assistance Communicating with Medical Provider to Beneficiaries Living Only in the Community Who Self-Reported Limited English Proficiency and Speak a Language Other than English at Home, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|---|----------------------|--------------------------|
| Persons Who Provide Assistance Communicating with Medical Provider | Family Member | 44.6 (2.4) |
| | No Assistance | 34.4 (2.2) |
| | Medical Office Staff | 21.0 (1.8) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table 1.1. Demographic and Socioeconomic Characteristics of All Medicare Beneficiaries, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|-----------------------------------|---------------------------------|--------------------------|
| Age | <45 years | 2.9 (0.0) |
| | 45-64 years | 11.4 (0.0) |
| | 65-74 years | 49.0 (0.0) |
| | 75-84 years | 25.5 (0.0) |
| | 85+ years | 11.2 (0.0) |
| Race/Ethnicity | White non-Hispanic | 75.5 (0.8) |
| | Black non-Hispanic | 9.9 (0.3) |
| | Hispanic | 8.5 (0.6) |
| Sex | Female | 54.3 (0.4) |
| | Male | 45.7 (0.4) |
| Metropolitan Area Resident | Metro area | 80.6 (0.4) |
| | Non-metro area | 19.4 (0.4) |
| Education | Less than a high school diploma | 14.9 (0.6) |
| | High school graduate | 26.7 (0.6) |
| | Some college/vocational school | 30.6 (0.7) |
| | Bachelor's degree and beyond | 27.9 (0.9) |
| Poverty Status | 0-100% FPL | 16.2 (0.4) |
| | 101-120% FPL | 5.5 (0.2) |
| | 121-135% FPL | 3.8 (0.2) |
| | 136-200% FPL | 16.2 (0.4) |
| | 201% FPL and above | 58.3 (0.7) |
| Residence Status | Living only in the community | 96.5 (0.1) |
| | Living only in facilities | 3.0 (0.1) |
| | Both community and facility | 0.5 (0.0) |
| Veteran | Yes | 18.4 (0.4) |
| | No | 81.6 (0.4) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category, although they are included in the denominator. FPL stands for Federal Poverty Level.

Table 1.2. Self-Reported Limited English Proficiency Among Beneficiaries Living Only in the Community Overall and by Age, Sex, Race/Ethnicity, and Self-Reported Health Status, 2018

| Measure | Measure Category | Estimate - % (St. Error) | |
|------------------------------------|--------------------|--------------------------|------------|
| | | Yes | No |
| Overall | Overall | 20.2 (0.6) | 79.8 (0.6) |
| Age | <65 years | 24.3 (1.3) | 75.7 (1.3) |
| | 65-74 years | 17.8 (0.8) | 82.2 (0.8) |
| | 75-84 years | 21.2 (0.9) | 78.8 (0.9) |
| | 85+ years | 23.2 (1.0) | 76.8 (1.0) |
| Sex | Female | 18.1 (0.7) | 81.9 (0.7) |
| | Male | 22.8 (0.8) | 77.2 (0.8) |
| Race/Ethnicity | White non-Hispanic | 14.5 (0.5) | 85.5 (0.5) |
| | Black non-Hispanic | 22.4 (1.5) | 77.6 (1.5) |
| | Hispanic | 59.0 (2.6) | 41.0 (2.6) |
| Self-Reported Health Status | Poor | 28.8 (2.0) | 71.2 (2.0) |
| | Fair | 27.0 (1.4) | 73.0 (1.4) |
| | Good | 23.9 (1.0) | 76.1 (1.0) |
| | Very good | 15.0 (0.7) | 85.0 (0.7) |
| | Excellent | 11.8 (0.8) | 88.2 (0.8) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed only Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Table 1.3 Insurance Coverage of All Medicare Beneficiaries, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|---|-------------------------------|--------------------------|
| Type of Medicare Coverage | Traditional FFS Medicare | 63.4 (0.5) |
| | Medicare Advantage | 36.6 (0.5) |
| Part D Coverage | FFS only | 22.9 (0.6) |
| | FFS with Part D | 40.5 (0.7) |
| | MA only | 0.9 (0.1) |
| | MA with Part D | 35.7 (0.5) |
| | | |
| Dual Eligible Status | Full-benefit dual eligible | 13.3 (0.5) |
| | Partial-benefit dual eligible | 5.9 (0.3) |
| | Not dual eligible | 80.8 (0.6) |
| Any Supplemental Private Insurance | Yes | 49.2 (0.6) |
| | No | 50.8 (0.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. FFS stands for Fee-for-Service. MA stands for Medicare Advantage.

Table 1.4 Supplemental Private Insurance Coverage of Medicare Beneficiaries Living in the Community, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|---|------------------|--------------------------|
| Any Employer-Sponsored Insurance | Yes | 27.5 (0.7) |
| | No | 72.5 (0.7) |
| ESI with Comprehensive Coverage | Yes | 80.7 (1.3) |
| | No | 19.3 (1.3) |
| Any Self-Pay Insurance | Yes | 26.0 (0.5) |
| | No | 74.0 (0.5) |
| Self-Pay with Comprehensive Coverage | Yes | 88.7 (0.7) |
| | No | 11.3 (0.7) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. ESI stands for Employer-Sponsored Insurance. Denominator for estimate of ESI with comprehensive coverage is among beneficiaries with any ESI. Denominator for estimate of self-pay with comprehensive coverage is among beneficiaries with any self-pay insurance.

Table 1.5.a. Type of Medicare Coverage of All Medicare Beneficiaries by Age, 2018

| Measure | Measure Category | Estimate - % (St. Error) | |
|---------|------------------|--------------------------|--------------------|
| | | Traditional FFS Medicare | Medicare Advantage |
| Age | <65 years | 65.6 (1.5) | 34.4 (1.5) |
| | 65-74 years | 64.9 (0.8) | 35.1 (0.8) |
| | 75-84 years | 59.7 (0.8) | 40.3 (0.8) |
| | 85+ years | 62.3 (0.9) | 37.7 (0.9) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. FFS stands for Fee-for-Service.

Table 1.5.b. Dual Eligible Status of All Medicare Beneficiaries by Age, 2018

| Measure | Measure Category | Estimate - % (St. Error) | |
|---------|------------------|--------------------------|------------|
| | | Yes | No |
| Age | <65 years | 53.0 (1.6) | 47.0 (1.6) |
| | 65-74 years | 12.6 (0.7) | 87.4 (0.7) |
| | 75-84 years | 13.1 (0.7) | 86.9 (0.7) |
| | 85+ years | 18.6 (0.9) | 81.4 (0.9) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. "Yes" includes beneficiaries with both full-benefit and partial-benefit Medicaid coverage.

Table 1.6. Residence Status of All Medicare Beneficiaries by Age, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|---------|------------------|------------------------------|---------------------------|-----------------------------|
| | | Living only in the community | Living only in facilities | Both community and facility |
| Age | <65 years | 14.5 (0.1) | 11.7 (1.5) | * |
| | 65-74 years | 50.2 (0.1) | 16.8 (1.9) | * |
| | 75-84 years | 25.5 (0.1) | 24.4 (1.7) | * |
| | 85+ years | 9.8 (0.1) | 47.1 (1.9) | 55.6 (5.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Some estimates for the category "Both community and facility" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 1.7. Residence Status of All Medicare Beneficiaries by Sex, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|---------|------------------|------------------------------|---------------------------|-----------------------------|
| | | Living only in the community | Living only in facilities | Both community and facility |
| Sex | Female | 53.9 (0.4) | 65.1 (1.9) | 58.8 (5.4) |
| | Male | 46.1 (0.4) | 34.9 (1.9) | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Some estimates for the category "Both community and facility" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 1.8. Demographic and Socioeconomic Characteristics of All Dual Eligible Medicare Beneficiaries, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|----------------|---------------------------------|--------------------------|
| Age | <65 years | 39.7 (1.1) |
| | 65-74 years | 32.1 (1.0) |
| | 75-84 years | 17.4 (0.7) |
| | 85+ years | 10.8 (0.5) |
| Race/Ethnicity | White non-Hispanic | 51.3 (1.7) |
| | Black non-Hispanic | 20.8 (1.2) |
| | Hispanic | 19.3 (1.3) |
| Sex | Female | 61.7 (1.1) |
| | Male | 38.3 (1.1) |
| Education | Less than a high school diploma | 37.2 (1.4) |
| | High school graduate | 32.5 (1.2) |
| | Some college/vocational school | 23.7 (1.0) |
| | Bachelor's degree and beyond | 6.6 (0.5) |
| Veteran | Yes | 5.8 (0.5) |
| | No | 94.2 (0.5) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries with both full-benefit and partial-benefit Medicaid coverage. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category, although they are included in the denominator.

Table 1.9. Demographic and Socioeconomic Characteristics of Medicare Beneficiaries Living Only in Facilities, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|-----------------------|---------------------------------|--------------------------|
| Age | <65 years | 11.7 (1.5) |
| | 65-74 years | 16.8 (1.9) |
| | 75-84 years | 24.4 (1.7) |
| | 85+ years | 47.1 (1.9) |
| Race/Ethnicity | White non-Hispanic | 85.1 (1.6) |
| | Black non-Hispanic | 8.6 (1.4) |
| | Hispanic | 4.2 (0.7) |
| Sex | Female | 65.1 (1.9) |
| | Male | 34.9 (1.9) |
| Education | Less than a high school diploma | 26.0 (2.9) |
| | High school graduate | 43.5 (2.8) |
| | Some college/vocational school | 23.8 (2.1) |
| | Bachelor's degree and beyond | * |
| Poverty Status | 0-100% FPL | 35.0 (2.1) |
| | 101-120% FPL | 10.5 (1.1) |
| | 121-135% FPL | 7.1 (0.8) |
| | 136-200% FPL | 15.9 (1.1) |
| | 201% FPL and above | 31.5 (2.2) |
| Veteran | Yes | 11.4 (1.1) |
| | No | 88.6 (1.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries for whom only Facility interviews were completed during the year. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category, although they are included in the denominator. FPL stands for Federal Poverty Level. Estimates for the category "Bachelor's degree and beyond" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 2.1. Quality of Life Metrics Among All Medicare Beneficiaries, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|--------------------------|--------------------------|--------------------------|
| Health Status | Poor | 6.0 (0.2) |
| | Fair | 17.7 (0.4) |
| | Good | 30.1 (0.5) |
| | Very good | 29.6 (0.5) |
| | Excellent | 16.6 (0.5) |
| Disability Status | LTC facility | 3.0 (0.1) |
| | Two or more disabilities | 24.3 (0.5) |
| | One disability | 20.6 (0.5) |
| | No disability | 52.0 (0.7) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. LTC stands for Long-Term Care. "LTC facility" includes beneficiaries who only completed Facility interviews during the year.

Table 2.2. Health Status Among All Medicare Beneficiaries Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | | | |
|----------------------------|--------------------|--------------------------|------------|------------|------------|------------|
| | | Poor | Fair | Good | Very good | Excellent |
| Overall | -- | 6.0 (0.2) | 17.7 (0.4) | 30.1 (0.5) | 29.6 (0.5) | 16.6 (0.5) |
| Age | <65 years | 20.4 (1.3) | 36.5 (1.5) | 28.6 (1.3) | 10.3 (1.0) | 4.2 (0.6) |
| | 65-74 years | 3.0 (0.2) | 14.2 (0.6) | 29.5 (0.8) | 33.8 (0.9) | 19.6 (0.8) |
| | 75-84 years | 4.0 (0.3) | 14.3 (0.6) | 31.0 (0.7) | 32.6 (0.8) | 18.1 (0.8) |
| | 85+ years | 5.5 (0.4) | 17.2 (0.9) | 32.8 (1.1) | 29.0 (1.0) | 15.4 (0.9) |
| Sex | Female | 6.0 (0.3) | 18.1 (0.6) | 29.5 (0.6) | 29.9 (0.7) | 16.6 (0.6) |
| | Male | 6.0 (0.4) | 17.3 (0.6) | 30.8 (0.8) | 29.3 (0.7) | 16.6 (0.7) |
| Race/ Ethnicity | White non-Hispanic | 5.5 (0.3) | 15.3 (0.4) | 28.9 (0.6) | 32.2 (0.6) | 18.2 (0.6) |
| | Black non-Hispanic | 7.8 (0.9) | 25.9 (1.6) | 34.6 (1.4) | 20.5 (1.3) | 11.1 (1.1) |
| | Hispanic | 8.6 (1.1) | 28.7 (1.5) | 33.0 (2.3) | 18.0 (1.8) | 11.6 (1.3) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category.

Table 2.3. Disability Status Among All Medicare Beneficiaries Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | | |
|----------------------------|--------------------|--------------------------|--------------------------|----------------|---------------|
| | | LTC facility | Two or more disabilities | One disability | No disability |
| Overall | -- | 3.0 (0.1) | 24.3 (0.5) | 20.6 (0.5) | 52.0 (0.7) |
| Age | <65 years | 2.4 (0.3) | 52.0 (1.5) | 24.2 (1.2) | 21.4 (1.2) |
| | 65-74 years | 1.0 (0.1) | 14.1 (0.6) | 17.3 (0.6) | 67.5 (0.9) |
| | 75-84 years | 2.8 (0.2) | 22.3 (0.7) | 23.9 (0.7) | 51.0 (1.1) |
| | 85+ years | 12.6 (0.6) | 38.4 (0.9) | 23.1 (0.8) | 25.9 (0.8) |
| Sex | Female | 3.6 (0.2) | 25.7 (0.6) | 19.8 (0.6) | 50.9 (0.8) |
| | Male | 2.3 (0.2) | 22.7 (0.6) | 21.7 (0.6) | 53.4 (0.9) |
| Race/ Ethnicity | White non-Hispanic | 3.4 (0.1) | 22.0 (0.5) | 20.7 (0.6) | 53.9 (0.8) |
| | Black non-Hispanic | 2.6 (0.4) | 32.2 (1.8) | 20.7 (1.3) | 44.5 (1.9) |
| | Hispanic | 1.5 (0.2) | 31.8 (1.5) | 19.7 (1.3) | 47.0 (2.0) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category. LTC stands for Long-Term Care. "LTC facility" includes beneficiaries who only completed Facility interviews during the year.

Table 2.4. Reported Chronic and Other Health Conditions Among All Medicare Beneficiaries, 2018

| Measure | Estimate - % (St. Error) |
|---|---------------------------------|
| Vision Problem | 99.6 (0.0) |
| Hypertension | 62.8 (0.5) |
| High Cholesterol | 62.6 (0.5) |
| Arthritis | 50.6 (0.6) |
| Hearing Trouble | 48.1 (0.6) |
| Diabetes | 33.8 (0.5) |
| Heart Disease | 31.9 (0.5) |
| Urinary Incontinence | 29.3 (0.5) |
| Mental Condition | 28.9 (0.5) |
| Depression | 26.3 (0.4) |
| Cognitive Impairment | 22.3 (0.4) |
| Skin Cancer | 20.5 (0.5) |
| Pulmonary Disease | 19.5 (0.5) |
| Cancer, Other than Skin | 18.4 (0.4) |
| Osteoporosis/Broken Hip | 17.8 (0.4) |
| Stroke | 9.8 (0.3) |
| Dementia, Other than Alzheimer's Disease | 3.3 (0.2) |
| Intellectual or Developmental Disability | 2.9 (0.2) |
| Alzheimer's Disease | 2.0 (0.1) |
| Parkinson's Disease | 1.3 (0.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available.

Table 2.5. Selected Reported Chronic Conditions Among All Medicare Beneficiaries Overall and by Age, 2018

| Measure | Estimate - % (St. Error) | | |
|----------------------|--------------------------|------------|------------|
| | Overall | <65 years | 65+ years |
| Hypertension | 62.8 (0.5) | 55.5 (1.7) | 64.0 (0.6) |
| Arthritis | 50.6 (0.6) | 53.1 (1.5) | 50.2 (0.7) |
| Diabetes | 33.8 (0.5) | 39.7 (1.4) | 32.8 (0.6) |
| Heart Disease | 31.9 (0.5) | 30.0 (1.4) | 32.2 (0.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available.

Table 2.6. Selected Reported Chronic Conditions Among All Medicare Beneficiaries Overall and by Race/Ethnicity, 2018

| Measure | Estimate - % (St. Error) | | | |
|----------------------|--------------------------|--------------------|--------------------|------------|
| | Overall | White non-Hispanic | Black non-Hispanic | Hispanic |
| Hypertension | 62.8 (0.5) | 60.1 (0.6) | 78.8 (1.4) | 64.8 (1.8) |
| Arthritis | 50.6 (0.6) | 50.8 (0.7) | 52.1 (1.9) | 47.5 (1.7) |
| Diabetes | 33.8 (0.5) | 29.9 (0.5) | 45.0 (2.1) | 46.8 (1.8) |
| Heart Disease | 31.9 (0.5) | 33.0 (0.6) | 30.2 (1.7) | 25.1 (1.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category.

Table 2.7. Selected Reported Chronic Conditions Among All Medicare Beneficiaries Overall and by Sex, 2018

| Measure | Estimate - % (St. Error) | | |
|----------------------|--------------------------|------------|------------|
| | Overall | Female | Male |
| Hypertension | 62.8 (0.5) | 62.8 (0.8) | 62.7 (0.8) |
| Arthritis | 50.6 (0.6) | 58.0 (0.8) | 42.0 (0.8) |
| Diabetes | 33.8 (0.5) | 32.1 (0.6) | 35.8 (0.7) |
| Heart Disease | 31.9 (0.5) | 28.2 (0.7) | 36.2 (0.9) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available.

Table 2.8. Smoking Status Among All Medicare Beneficiaries Overall and by Sex, Race/Ethnicity, and Poverty Status, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|----------------------------|--------------------|--------------------------|-------------|----------------|
| | | Never smoked | Ever smoked | Current smoker |
| Overall | -- | 47.0 (0.7) | 39.9 (0.5) | 13.2 (0.4) |
| Sex | Female | 56.2 (0.8) | 33.6 (0.7) | 10.2 (0.5) |
| | Male | 36.0 (0.9) | 47.3 (0.9) | 16.7 (0.6) |
| Race/ Ethnicity | White non-Hispanic | 45.0 (0.8) | 42.0 (0.7) | 13.0 (0.4) |
| | Black non-Hispanic | 51.7 (1.8) | 32.1 (1.4) | 16.3 (1.2) |
| | Hispanic | 55.8 (1.7) | 33.6 (1.7) | 10.5 (1.3) |
| Poverty Status | 0-100% FPL | 48.5 (1.3) | 28.1 (1.1) | 23.4 (1.3) |
| | 101-120% FPL | 48.3 (2.0) | 33.0 (1.8) | 18.6 (1.4) |
| | 121-135% FPL | 46.0 (2.5) | 38.1 (2.3) | 15.9 (1.9) |
| | 136-200% FPL | 45.8 (1.2) | 39.4 (1.4) | 14.8 (1.1) |
| | 201% FPL and above | 46.8 (0.8) | 43.9 (0.8) | 9.3 (0.4) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category. FPL stands for Federal Poverty Level.

Table 2.9. Self-Reported Alcohol Use Among Medicare Beneficiaries Living in the Community Overall and by Sex, Race/Ethnicity, and Poverty Status, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|----------------------------|--------------------|--------------------------|------------------|---------------|
| | | Nondrinker | Moderate drinker | Heavy drinker |
| Overall | -- | 45.5 (0.8) | 39.6 (0.6) | 14.9 (0.5) |
| Sex | Female | 49.1 (1.0) | 34.0 (0.8) | 16.9 (0.6) |
| | Male | 41.3 (0.8) | 46.1 (0.9) | 12.6 (0.5) |
| Race/ Ethnicity | White non-Hispanic | 40.6 (0.9) | 43.6 (0.8) | 15.8 (0.6) |
| | Black non-Hispanic | 62.9 (2.1) | 24.7 (1.7) | 12.4 (1.3) |
| | Hispanic | 57.9 (1.9) | 29.2 (1.8) | 13.0 (1.3) |
| Poverty Status | 0-100% FPL | 68.3 (1.2) | 18.0 (0.9) | 13.7 (0.8) |
| | 101-120% FPL | 61.2 (2.3) | 27.1 (2.2) | 11.6 (1.5) |
| | 121-135% FPL | 59.6 (2.7) | 25.0 (2.2) | 15.4 (1.8) |
| | 136-200% FPL | 56.4 (1.3) | 30.7 (1.1) | 12.9 (1.0) |
| | 201% FPL and above | 34.1 (0.9) | 49.8 (0.9) | 16.1 (0.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FPL stands for Federal Poverty Level.

Table 2.10. Self-Reported Preventive Health Behaviors Among Medicare Beneficiaries Living in the Community, 2018

| Measure | Estimate - % (St. Error) | |
|---------------------------------|--------------------------|------------|
| | Yes | No |
| Blood Pressure Screening | 96.2 (0.3) | 3.8 (0.3) |
| Pneumonia Shot | 80.0 (0.6) | 20.0 (0.6) |
| Flu Shot | 71.5 (0.7) | 28.5 (0.7) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table 2.11. Self-Reported Preventive Health Behaviors Among Medicare Beneficiaries Living in the Community Overall and by Age, Race/Ethnicity, and Type of Medicare Coverage, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|--|--------------------------|--------------------------|----------------|------------|
| | | Blood Pressure Screening | Pneumonia Shot | Flu Shot |
| Overall | -- | 96.2 (0.3) | 80.0 (0.6) | 71.5 (0.7) |
| Age | <65 years | 96.0 (0.5) | 59.9 (1.6) | 53.9 (1.9) |
| | 65-74 years | 95.1 (0.5) | 79.0 (0.8) | 70.2 (1.1) |
| | 75-84 years | 97.7 (0.2) | 88.1 (0.6) | 80.2 (0.7) |
| | 85+ years | 98.4 (0.3) | 89.8 (0.7) | 81.2 (1.0) |
| Race/ Ethnicity | White non-Hispanic | 96.2 (0.3) | 81.8 (0.6) | 73.0 (0.8) |
| | Black non-Hispanic | 96.4 (0.6) | 73.4 (2.1) | 63.5 (1.9) |
| | Hispanic | 96.6 (0.7) | 72.7 (2.1) | 68.2 (2.1) |
| Type of Medicare Coverage | Traditional FFS Medicare | 95.5 (0.4) | 79.4 (0.8) | 70.7 (0.9) |
| | Medicare Advantage | 97.4 (0.3) | 81.1 (0.9) | 72.7 (1.0) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FFS stands for Fee-for-Service.

Table 2.12. Self-Reported Receipt of Shingles Vaccine Among Medicare Beneficiaries Aged 60 and Over Living in the Community Overall and by Age, Race/Ethnicity, and Type of Medicare Coverage, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|----------------------------------|--------------------------|--------------------------|
| Overall | -- | 53.5 (0.9) |
| Age | 60-64 years | 25.4 (2.6) |
| | 65-74 years | 53.8 (1.2) |
| | 75-84 years | 58.3 (1.1) |
| | 85+ years | 52.1 (1.4) |
| Race/Ethnicity | White non-Hispanic | 57.8 (1.1) |
| | Black non-Hispanic | 33.5 (2.4) |
| | Hispanic | 36.0 (2.5) |
| Type of Medicare Coverage | Traditional FFS Medicare | 55.0 (1.1) |
| | Medicare Advantage | 50.9 (1.3) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FFS stands for Fee-for-Service.

Table 2.13. Selected Reported Chronic Conditions Among All Medicare Beneficiaries Overall and by Residence Status, 2018

| Measure | Overall | Estimate - % (St. Error) | | |
|----------------------|------------|------------------------------|---------------------------|-----------------------------|
| | | Living only in the community | Living only in facilities | Both community and facility |
| Hypertension | 62.8 (0.5) | 62.7 (0.6) | 65.9 (1.7) | 63.6 (5.4) |
| Arthritis | 50.6 (0.6) | 51.2 (0.6) | 28.0 (2.0) | * |
| Diabetes | 33.8 (0.5) | 34.0 (0.5) | 28.2 (2.1) | * |
| Heart Disease | 31.9 (0.5) | 31.5 (0.5) | 48.3 (1.8) | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Some estimates for the category "Both community and facility" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 2.14. Mobility Limitations Among All Medicare Beneficiaries Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|-----------------------|--------------------|--------------------------|-------------------------|---------------|
| | | Yes, with any disability | Yes, with no disability | No limitation |
| Overall | -- | 33.6 (0.5) | 10.0 (0.3) | 56.4 (0.6) |
| Age | <65 years | 59.5 (1.7) | 7.6 (0.8) | 32.9 (1.5) |
| | 65-74 years | 20.2 (0.7) | 10.2 (0.5) | 69.6 (0.8) |
| | 75-84 years | 34.0 (0.9) | 11.0 (0.5) | 54.9 (0.9) |
| | 85+ years | 61.9 (0.9) | 9.6 (0.7) | 28.6 (0.8) |
| Sex | Female | 36.9 (0.7) | 11.2 (0.5) | 51.9 (0.7) |
| | Male | 29.8 (0.7) | 8.5 (0.4) | 61.8 (0.7) |
| Race/Ethnicity | White non-Hispanic | 31.6 (0.6) | 10.0 (0.4) | 58.5 (0.6) |
| | Black non-Hispanic | 44.8 (1.8) | 12.7 (1.1) | 42.5 (1.7) |
| | Hispanic | 37.5 (1.8) | 8.1 (1.0) | 54.3 (1.9) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category.

Table 2.15. Upper Extremity Limitations Among All Medicare Beneficiaries Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|-----------------------|--------------------|--------------------------|-------------------------|---------------|
| | | Yes, with any disability | Yes, with no disability | No limitation |
| Overall | -- | 28.4 (0.5) | 11.3 (0.3) | 60.3 (0.5) |
| Age | <65 years | 54.0 (1.4) | 7.3 (0.8) | 38.7 (1.4) |
| | 65-74 years | 17.1 (0.6) | 13.2 (0.5) | 69.7 (0.7) |
| | 75-84 years | 27.3 (0.8) | 11.4 (0.5) | 61.3 (0.7) |
| | 85+ years | 49.8 (1.1) | 7.4 (0.5) | 42.9 (1.1) |
| Sex | Female | 30.9 (0.6) | 12.0 (0.4) | 57.1 (0.7) |
| | Male | 25.4 (0.7) | 10.5 (0.5) | 64.2 (0.7) |
| Race/Ethnicity | White non-Hispanic | 26.1 (0.5) | 11.8 (0.4) | 62.1 (0.6) |
| | Black non-Hispanic | 38.8 (1.8) | 11.0 (0.9) | 50.2 (1.7) |
| | Hispanic | 32.1 (1.6) | 8.5 (0.9) | 59.4 (1.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category.

Table 2.16. Mortality Rates Among All Medicare Beneficiaries Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|-----------------------|--------------------|--------------------------|
| Overall | -- | 3.6 (0.2) |
| Age | <65 years | * |
| | 65-74 years | 1.5 (0.2) |
| | 75-84 years | 4.2 (0.3) |
| | 85+ years | 12.7 (0.7) |
| Sex | Female | 3.0 (0.2) |
| | Male | 4.2 (0.3) |
| Race/Ethnicity | White non-Hispanic | 3.9 (0.2) |
| | Black non-Hispanic | * |
| | Hispanic | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are not presented for the "other race/ethnicity" category. Estimates for the categories "<65 years," "Black non-Hispanic," and "Hispanic" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 2.17. Number of Chronic Conditions Among All Medicare Beneficiaries Overall and by Age, Sex, Race/Ethnicity, and Type of Medicare Coverage, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | | | |
|--|--------------------------|--------------------------|-------------|----------------|----------------|----------------------|
| | | No conditions | 1 condition | 2-3 conditions | 4-5 conditions | 6 or more conditions |
| Overall | -- | 5.3 (0.3) | 11.1 (0.4) | 38.1 (0.5) | 32.5 (0.5) | 12.9 (0.4) |
| Age | <65 years | 5.3 (0.6) | 11.7 (0.9) | 30.5 (1.2) | 33.3 (1.4) | 19.2 (1.2) |
| | 65+ years | 5.4 (0.3) | 11.0 (0.4) | 39.4 (0.6) | 32.4 (0.5) | 11.9 (0.4) |
| Sex | Female | 4.3 (0.3) | 10.1 (0.4) | 36.9 (0.7) | 33.5 (0.7) | 15.2 (0.6) |
| | Male | 6.6 (0.5) | 12.4 (0.6) | 39.5 (0.7) | 31.4 (0.7) | 10.2 (0.4) |
| Race/ Ethnicity | White | 5.5 (0.3) | 11.2 (0.4) | 38.9 (0.6) | 32.1 (0.6) | 12.4 (0.4) |
| | non-Hispanic | | | | | |
| | Black non-Hispanic | 5.9 (0.9) | 8.2 (0.9) | 37.0 (1.9) | 34.8 (1.7) | 14.1 (1.1) |
| | Hispanic | 3.6 (0.5) | 12.8 (1.8) | 36.2 (2.1) | 32.9 (1.7) | 14.5 (1.2) |
| Type of Medicare Coverage | Traditional FFS Medicare | 5.9 (0.4) | 12.0 (0.5) | 38.4 (0.7) | 31.5 (0.6) | 12.1 (0.4) |
| | Medicare Advantage | 4.3 (0.3) | 9.7 (0.4) | 37.5 (0.8) | 34.3 (0.8) | 14.3 (0.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Data for beneficiaries living in long-term care facilities were abstracted from the Long-Term Care Minimum Data Set (MDS) 3.0 when available. Estimates are not presented for the "other race/ethnicity" category. FFS stands for Fee-for-Service.

Table 2.18. Self-Reported Physical Activity Among Medicare Beneficiaries Living in the Community Overall and by Sex, Race/Ethnicity, and Poverty Status, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|----------------------------|--------------------|--------------------------|------------|---------------|
| | | Sedentary | Active | Highly Active |
| Overall | -- | 42.8 (0.6) | 12.8 (0.4) | 44.4 (0.6) |
| Sex | Female | 47.2 (0.7) | 13.4 (0.6) | 39.4 (0.8) |
| | Male | 37.6 (0.8) | 12.2 (0.5) | 50.2 (0.8) |
| Race/ Ethnicity | White non-Hispanic | 39.6 (0.7) | 13.2 (0.4) | 47.2 (0.7) |
| | Black non-Hispanic | 54.9 (2.0) | 11.9 (1.2) | 33.2 (2.0) |
| | Hispanic | 54.0 (1.9) | 11.2 (1.3) | 34.8 (1.9) |
| Poverty Status | 0-100% FPL | 62.2 (1.5) | 9.4 (0.8) | 28.4 (1.3) |
| | 101-120% FPL | 57.8 (1.8) | 10.9 (1.3) | 31.2 (1.9) |
| | 121-135% FPL | 58.1 (3.1) | * | 33.6 (2.6) |
| | 136-200% FPL | 51.2 (1.4) | 11.7 (0.8) | 37.1 (1.4) |
| | 201% FPL and above | 33.2 (0.7) | 14.5 (0.6) | 52.3 (0.8) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FPL stands for Federal Poverty Level. Some estimates for the category "Active" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 2.19. Self-Reported Mammogram Among Female Medicare Beneficiaries Living in the Community Overall and by Age, Race/Ethnicity, and Type of Medicare Coverage, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|----------------------------------|--------------------------|--------------------------|
| Overall | -- | 43.3 (0.8) |
| Age | <65 years | 40.0 (2.1) |
| | 65-74 years | 51.4 (1.3) |
| | 75-84 years | 39.4 (1.2) |
| | 85+ years | 17.6 (1.2) |
| | | |
| Race/Ethnicity | White non-Hispanic | 41.7 (1.0) |
| | Black non-Hispanic | 51.4 (2.4) |
| | Hispanic | 48.5 (2.6) |
| Type of Medicare Coverage | Traditional FFS Medicare | 42.3 (1.0) |
| | Medicare Advantage | 44.9 (1.3) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Table 2.20. Self-Reported Hysterectomy Among Female Medicare Beneficiaries Living in the Community Overall and by Age, Race/Ethnicity, and Type of Medicare Coverage, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|----------------------------------|--------------------------|--------------------------|
| Overall | -- | 41.0 (0.8) |
| Age | <65 years | 32.1 (2.2) |
| | 65-74 years | 37.4 (1.1) |
| | 75-84 years | 49.3 (1.2) |
| | 85+ years | 48.5 (1.5) |
| | | |
| Race/Ethnicity | White non-Hispanic | 40.4 (0.9) |
| | Black non-Hispanic | 47.5 (2.3) |
| | Hispanic | 39.0 (2.6) |
| Type of Medicare Coverage | Traditional FFS Medicare | 39.9 (1.0) |
| | Medicare Advantage | 42.8 (1.3) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who completed at least one Community interview during the year. This excludes beneficiaries for whom only Facility interviews were completed during the year. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. FFS stands for Fee-for-Service.

Table 3.1. Usual Source of Care Among Medicare Beneficiaries Living Only in the Community Overall and by Type of Medicare Coverage, 2018

| Measure | Estimate - % (St. Error) | | |
|-----------------------------------|--------------------------|--------------------------|--------------------|
| | Overall | Traditional FFS Medicare | Medicare Advantage |
| Doctor's office | 63.7 (2.0) | 64.5 (2.1) | 62.4 (2.2) |
| Medical clinic | 17.7 (1.5) | 16.9 (1.5) | 19.1 (1.9) |
| None | 6.9 (0.4) | 7.5 (0.5) | 5.7 (0.4) |
| Other clinic/health center | 5.0 (0.4) | 6.0 (0.5) | 3.4 (0.3) |
| Hospital/OPD/ER | 3.2 (0.7) | 3.8 (0.9) | 2.2 (0.4) |
| Managed care center | 3.5 (0.6) | 1.3 (0.3) | 7.4 (1.3) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. ER stands for Emergency Room. FFS stands for Fee-for-Service. OPD stands for Outpatient Department.

Table 3.2. Indicators of Propensity to Seek Care Among Medicare Beneficiaries Living Only in the Community, 2018

| Measure | Estimate - % (St. Error) |
|---|--------------------------|
| Visit a Doctor as Soon as You Feel Bad | 40.1 (0.6) |
| When Sick, Keep It to Yourself | 36.0 (0.7) |
| Avoid Going to the Doctor | 25.1 (0.6) |
| Worry About Your Health More than Others | 23.5 (0.6) |
| Ever Had a Prescription You Did Not Fill Due to Cost | 9.5 (0.4) |
| Had a Problem and Did Not Seek Doctor | 6.9 (0.4) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table 3.3. Indicators of Propensity to Seek Care Among Medicare Beneficiaries Living Only in the Community Overall and by Age, 2018

| Measure | Estimate - % (St. Error) | | | | |
|---|--------------------------|------------|-------------|-------------|------------|
| | Overall | <65 years | 65-74 years | 75-84 years | 85+ years |
| Visit a Doctor as Soon as You Feel Bad | 40.1 (0.6) | 43.2 (1.4) | 37.8 (0.9) | 41.8 (0.9) | 43.8 (1.4) |
| When Sick, Keep It to Yourself | 36.0 (0.7) | 49.0 (1.4) | 34.6 (1.1) | 33.4 (0.7) | 31.0 (1.2) |
| Avoid Going to the Doctor | 25.1 (0.6) | 37.7 (1.4) | 23.9 (0.9) | 21.4 (0.8) | 22.5 (1.0) |
| Worry About Your Health More than Others | 23.5 (0.6) | 57.4 (1.5) | 18.5 (0.8) | 17.4 (0.7) | 14.8 (0.8) |
| Ever Had a Prescription You Did Not Fill Due to Cost | 9.5 (0.4) | 18.5 (1.5) | 8.7 (0.5) | 7.7 (0.6) | 5.2 (0.7) |
| Had a Problem and Did Not Seek Doctor | 6.9 (0.4) | 15.9 (1.5) | 5.8 (0.6) | 5.1 (0.5) | 5.2 (0.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table 3.4. Indicators of Propensity to Seek Care Among Medicare Beneficiaries Living Only in the Community Overall and by Sex, 2018

| Measure | Estimate - % (St. Error) | | |
|---|--------------------------|------------|------------|
| | Overall | Female | Male |
| Visit a Doctor as Soon as You Feel Bad | 40.1 (0.6) | 38.6 (0.8) | 41.9 (0.8) |
| When Sick, Keep It to Yourself | 36.0 (0.7) | 38.4 (0.8) | 33.2 (0.9) |
| Avoid Going to the Doctor | 25.1 (0.6) | 26.4 (0.8) | 23.6 (0.8) |
| Worry About Your Health More than Others | 23.5 (0.6) | 22.8 (0.7) | 24.3 (0.8) |
| Ever Had a Prescription You Did Not Fill Due to Cost | 9.5 (0.4) | 11.1 (0.5) | 7.5 (0.6) |
| Had a Problem and Did Not Seek Doctor | 6.9 (0.4) | 7.7 (0.5) | 6.0 (0.6) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table 3.5. Indicators of Propensity to Seek Care Among Medicare Beneficiaries Living Only in the Community Overall and by Race/Ethnicity, 2018

| Measure | Estimate - % (St. Error) | | | |
|---|--------------------------|--------------------|--------------------|------------|
| | Overall | White non-Hispanic | Black non-Hispanic | Hispanic |
| Visit a Doctor as Soon as You Feel Bad | 40.1 (0.6) | 36.2 (0.6) | 49.2 (2.0) | 61.3 (2.0) |
| When Sick, Keep It to Yourself | 36.0 (0.7) | 35.7 (0.8) | 38.5 (1.9) | 36.4 (1.7) |
| Avoid Going to the Doctor | 25.1 (0.6) | 22.7 (0.7) | 31.4 (1.8) | 36.5 (1.8) |
| Worry About Your Health More than Others | 23.5 (0.6) | 17.7 (0.5) | 37.0 (1.6) | 52.4 (2.3) |
| Ever Had a Prescription You Did Not Fill Due to Cost | 9.5 (0.4) | 8.6 (0.4) | 14.5 (1.4) | 8.1 (1.2) |
| Had a Problem and Did Not Seek Doctor | 6.9 (0.4) | 6.8 (0.5) | 7.5 (1.1) | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. Some estimates for the category "Hispanic" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 3.6. Indicators of Satisfaction with Care Among Medicare Beneficiaries Living Only in the Community, 2018

| Measure | Estimate - % (St. Error) | | | |
|--|--------------------------|------------|----------------|---------------|
| | (Very) dissatisfied | Satisfied | Very satisfied | No experience |
| General Care | 4.9 (0.2) | 40.9 (0.6) | 52.0 (0.7) | 2.2 (0.2) |
| Information from Doctor | 5.9 (0.3) | 53.5 (0.6) | 38.0 (0.7) | 2.7 (0.2) |
| Doctor's Concern for Overall Health | 5.6 (0.3) | 53.4 (0.7) | 38.6 (0.8) | 2.5 (0.2) |
| Cost | 16.2 (0.5) | 49.6 (0.6) | 31.5 (0.6) | 2.7 (0.2) |
| Night and Weekend Availability | 5.5 (0.3) | 35.0 (0.6) | 24.6 (0.7) | 34.9 (0.9) |
| Ease of Access to Doctor | 4.9 (0.3) | 48.3 (0.7) | 45.3 (0.8) | 1.5 (0.2) |
| Can Obtain Care in Same Location | 8.8 (0.4) | 48.1 (0.7) | 30.3 (0.8) | 12.7 (0.8) |
| Availability of Specialist Care | 6.5 (0.3) | 50.6 (0.6) | 35.9 (0.8) | 7.1 (0.4) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. The category "(Very) dissatisfied" includes beneficiaries whose response to the question was "dissatisfied" or "very dissatisfied."

Table 3.7. Satisfaction with Access to Care Among Medicare Beneficiaries Living Only in the Community by Age, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | | |
|---|------------------|--------------------------|------------|----------------|---------------|
| | | (Very) dissatisfied | Satisfied | Very satisfied | No experience |
| Night and Weekend Availability | <65 years | 10.1 (0.8) | 45.1 (1.3) | 22.4 (1.2) | 22.4 (1.4) |
| | 65-74 years | 5.0 (0.4) | 33.3 (0.9) | 24.9 (0.9) | 36.8 (1.1) |
| | 75-84 years | 4.0 (0.3) | 32.6 (0.8) | 26.1 (0.8) | 37.3 (1.0) |
| | 85+ years | 4.7 (0.5) | 34.9 (1.2) | 22.6 (1.0) | 37.7 (1.4) |
| Ease of Access to Doctor | <65 years | 12.1 (1.0) | 55.5 (1.3) | 31.1 (1.3) | * |
| | 65-74 years | 3.6 (0.3) | 46.4 (1.0) | 48.4 (1.0) | 1.6 (0.3) |
| | 75-84 years | 3.8 (0.3) | 46.3 (0.9) | 48.5 (1.0) | 1.4 (0.2) |
| | 85+ years | 3.6 (0.4) | 53.0 (1.4) | 42.0 (1.2) | * |
| Can Obtain Care in Same Location | <65 years | 16.1 (1.2) | 50.8 (1.3) | 24.7 (1.4) | 8.5 (0.9) |
| | 65-74 years | 8.1 (0.5) | 46.7 (1.0) | 31.9 (1.2) | 13.4 (0.9) |
| | 75-84 years | 7.1 (0.5) | 47.9 (0.8) | 31.5 (0.9) | 13.5 (1.0) |
| | 85+ years | 6.1 (0.5) | 52.8 (1.1) | 27.3 (1.0) | 13.8 (1.1) |
| Availability of Specialist Care | <65 years | 12.3 (0.8) | 55.8 (1.4) | 27.0 (1.3) | 4.9 (0.6) |
| | 65-74 years | 6.0 (0.4) | 48.1 (0.8) | 38.1 (1.1) | 7.7 (0.6) |
| | 75-84 years | 4.8 (0.3) | 51.1 (0.9) | 37.7 (1.0) | 6.4 (0.5) |
| | 85+ years | 4.1 (0.5) | 54.7 (1.2) | 32.8 (1.1) | 8.4 (0.7) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. The category "(Very) dissatisfied" includes beneficiaries whose response to the question was "dissatisfied" or "very dissatisfied." Some estimates for the category "No experience" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 3.8. Perceived Knowledge of the Medicare Program Among Medicare Beneficiaries Living Only in the Community Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|-----------------------|--------------------|--------------------------|------------|-------------|
| | | Little or none | Some | Most or all |
| Overall | -- | 24.6 (0.6) | 34.0 (0.6) | 41.5 (0.7) |
| Age | <65 years | 34.0 (1.5) | 35.4 (1.5) | 30.6 (1.3) |
| | 65-74 years | 22.4 (0.9) | 34.6 (1.1) | 43.0 (1.0) |
| | 75-84 years | 23.7 (0.8) | 32.3 (0.7) | 44.0 (0.9) |
| | 85+ years | 24.0 (1.1) | 33.3 (1.3) | 42.7 (1.4) |
| Sex | Female | 24.0 (0.7) | 35.5 (0.8) | 40.5 (0.8) |
| | Male | 25.2 (0.8) | 32.2 (0.8) | 42.6 (0.9) |
| Race/Ethnicity | White non-Hispanic | 22.9 (0.7) | 33.5 (0.7) | 43.6 (0.8) |
| | Black non-Hispanic | 25.1 (1.5) | 37.6 (1.6) | 37.4 (1.8) |
| | Hispanic | 37.8 (2.0) | 31.7 (1.7) | 30.5 (1.9) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Table 3.9. Self-Reported Physician Wait Time Among Medicare Beneficiaries Living Only in the Community Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | | | |
|----------------------------|--------------------|--------------------------|------------|------------|------------|------------|
| | | 19+ days | 13-18 days | 7-12 days | 1-6 days | No wait |
| Overall | -- | 32.8 (1.2) | 11.3 (0.6) | 14.5 (0.6) | 17.0 (0.6) | 24.4 (1.4) |
| Age | <65 years | 35.4 (2.3) | 10.3 (1.2) | 15.8 (1.4) | 15.8 (1.3) | 22.7 (2.1) |
| | 65-74 years | 33.1 (1.4) | 12.2 (0.9) | 14.6 (0.9) | 16.3 (0.9) | 23.8 (1.5) |
| | 75-84 years | 31.4 (1.3) | 11.2 (0.7) | 13.5 (0.8) | 19.0 (1.0) | 25.0 (1.3) |
| | 85+ years | 31.2 (1.8) | 7.9 (0.9) | 14.5 (1.2) | 17.5 (1.3) | 29.0 (2.3) |
| Sex | Female | 32.2 (1.2) | 11.0 (0.7) | 14.6 (0.8) | 17.1 (0.7) | 25.1 (1.5) |
| | Male | 33.5 (1.5) | 11.7 (0.8) | 14.3 (0.7) | 16.9 (0.9) | 23.6 (1.6) |
| Race/ Ethnicity | White non-Hispanic | 32.2 (1.4) | 11.0 (0.6) | 14.3 (0.7) | 17.3 (0.8) | 25.1 (1.5) |
| | Black non-Hispanic | 36.2 (2.5) | 12.3 (1.9) | 12.9 (1.6) | 17.2 (1.8) | 21.3 (2.2) |
| | Hispanic | 32.1 (2.1) | 11.9 (1.5) | 18.4 (2.0) | 15.0 (1.7) | 22.6 (2.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Table 3.10. Satisfaction with Quality and Cost of Care Among Medicare Beneficiaries Living Only in the Community by Age, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | | |
|--|------------------|--------------------------|------------|----------------|---------------|
| | | (Very) dissatisfied | Satisfied | Very satisfied | No experience |
| General Care | <65 years | 11.5 (1.0) | 48.2 (1.4) | 38.2 (1.4) | 2.2 (0.4) |
| | 65-74 years | 3.7 (0.3) | 38.4 (0.9) | 55.0 (1.1) | 2.8 (0.4) |
| | 75-84 years | 3.7 (0.3) | 40.2 (0.9) | 54.8 (0.9) | 1.4 (0.2) |
| | 85+ years | 4.3 (0.5) | 45.4 (1.0) | 49.4 (1.0) | * |
| Information from Doctor | <65 years | 12.0 (1.0) | 57.6 (1.6) | 28.1 (1.4) | 2.3 (0.4) |
| | 65-74 years | 4.6 (0.4) | 51.1 (0.9) | 41.0 (1.0) | 3.3 (0.4) |
| | 75-84 years | 5.1 (0.3) | 53.6 (1.0) | 39.4 (0.9) | 1.8 (0.2) |
| | 85+ years | 5.9 (0.5) | 59.8 (1.1) | 32.4 (1.0) | * |
| Doctor's Concern for Overall Health | <65 years | 11.4 (1.1) | 58.3 (1.4) | 27.7 (1.4) | 2.6 (0.4) |
| | 65-74 years | 4.7 (0.4) | 50.8 (1.0) | 41.6 (1.1) | 2.9 (0.4) |
| | 75-84 years | 4.5 (0.3) | 53.6 (1.0) | 39.9 (1.0) | 2.0 (0.2) |
| | 85+ years | 4.4 (0.5) | 59.3 (1.2) | 34.9 (1.2) | * |
| Cost | <65 years | 27.0 (1.5) | 46.7 (1.5) | 23.2 (1.1) | 3.0 (0.4) |
| | 65-74 years | 15.2 (0.7) | 49.1 (0.9) | 32.8 (0.9) | 2.9 (0.3) |
| | 75-84 years | 13.8 (0.6) | 50.4 (0.9) | 33.3 (1.0) | 2.5 (0.3) |
| | 85+ years | 10.9 (0.8) | 54.9 (1.0) | 32.0 (1.0) | 2.2 (0.3) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. The category "(Very) dissatisfied" includes beneficiaries whose response to the question was "dissatisfied" or "very dissatisfied." Some estimates for the category "No experience" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 3.11. Difficulty Obtaining Care and Delayed Care Due to Cost Among Medicare Beneficiaries Living Only in the Community Overall and by Type of Medicare Coverage, 2018

| Measure | Measure Category | Estimate - % (St. Error) | | |
|----------------------------------|------------------|--------------------------|--------------------------|--------------------|
| | | Overall | Traditional FFS Medicare | Medicare Advantage |
| Difficulty Obtaining Care | Yes | 7.4 (0.3) | 6.8 (0.5) | 8.4 (0.5) |
| | No | 92.6 (0.3) | 93.2 (0.5) | 91.6 (0.5) |
| Delayed Care Due to Cost | Yes | 11.0 (0.4) | 10.4 (0.6) | 12.1 (0.7) |
| | No | 89.0 (0.4) | 89.6 (0.6) | 87.9 (0.7) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. FFS stands for Fee-for-Service.

Table 3.12. Indicators of Satisfaction with Care Among Medicare Beneficiaries Living Only in the Community by Type of Medicare Coverage, 2018

| Measure | Type of Medicare Coverage | Estimate - % (St. Error) | | | |
|--|---------------------------|--------------------------|------------|----------------|---------------|
| | | (Very) dissatisfied | Satisfied | Very satisfied | No experience |
| General Care | Traditional FFS Medicare | 4.6 (0.3) | 39.4 (0.9) | 53.3 (0.9) | 2.6 (0.3) |
| | Medicare Advantage | 5.4 (0.4) | 43.6 (0.7) | 49.7 (0.9) | 1.4 (0.2) |
| Information from Doctor | Traditional FFS Medicare | 5.8 (0.4) | 52.0 (0.8) | 39.2 (0.9) | 3.1 (0.3) |
| | Medicare Advantage | 6.1 (0.4) | 56.0 (0.9) | 35.8 (0.9) | 2.0 (0.2) |
| Doctor's Concern for Overall Health | Traditional FFS Medicare | 5.8 (0.4) | 52.0 (0.9) | 39.2 (1.1) | 3.0 (0.4) |
| | Medicare Advantage | 5.2 (0.4) | 55.8 (0.9) | 37.4 (0.9) | 1.6 (0.2) |
| Cost | Traditional FFS Medicare | 15.9 (0.7) | 48.0 (0.8) | 33.3 (0.7) | 2.9 (0.3) |
| | Medicare Advantage | 16.7 (0.8) | 52.4 (0.8) | 28.3 (0.9) | 2.6 (0.2) |
| Night and Weekend Availability | Traditional FFS Medicare | 5.8 (0.4) | 34.2 (0.8) | 25.1 (0.9) | 34.9 (1.0) |
| | Medicare Advantage | 5.0 (0.4) | 36.4 (0.8) | 23.8 (0.9) | 34.8 (1.1) |
| Ease of Access to Doctor | Traditional FFS Medicare | 5.4 (0.4) | 47.0 (0.8) | 45.7 (0.9) | 1.9 (0.2) |
| | Medicare Advantage | 4.0 (0.4) | 50.5 (0.9) | 44.7 (1.0) | * |
| Can Obtain Care in Same Location | Traditional FFS Medicare | 9.7 (0.5) | 46.1 (0.9) | 29.8 (1.0) | 14.4 (0.9) |
| | Medicare Advantage | 7.2 (0.4) | 51.7 (1.1) | 31.2 (1.0) | 9.9 (0.8) |
| Availability of Specialist Care | Traditional FFS Medicare | 6.5 (0.4) | 49.0 (0.7) | 37.1 (0.9) | 7.4 (0.5) |
| | Medicare Advantage | 6.4 (0.5) | 53.4 (1.0) | 33.7 (0.9) | 6.5 (0.5) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. FFS stands for Fee-for-Service. The category "(Very) dissatisfied" includes beneficiaries whose response to the question was "dissatisfied" or "very dissatisfied." Some estimates for the category "No experience" are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 3.13. Satisfaction with the Availability of Information on the Medicare Program Among Medicare Beneficiaries Living Only in the Community Overall and by Age, Sex, and Race/Ethnicity, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|-----------------------|--------------------|--------------------------|
| Overall | -- | 89.4 (0.5) |
| Age | <65 years | 82.7 (1.5) |
| | 65-74 years | 89.5 (0.7) |
| | 75-84 years | 91.7 (0.5) |
| | 85+ years | 93.5 (0.8) |
| Sex | Female | 89.3 (0.6) |
| | Male | 89.6 (0.6) |
| Race/Ethnicity | White non-Hispanic | 89.2 (0.5) |
| | Black non-Hispanic | 90.7 (1.1) |
| | Hispanic | 91.8 (1.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category.

Table 4.1. User Rates of Health Care Services Among All Medicare Beneficiaries, 2018

| Measure | Estimate - % (St. Error) |
|--------------------------------------|--------------------------|
| Physician/Supplier Services | 96.2 (0.3) |
| Prescription Drugs | 93.8 (0.4) |
| Outpatient Hospital Services | 74.0 (0.8) |
| Dental Services | 52.8 (0.8) |
| Inpatient Hospital Services | 14.6 (0.5) |
| Skilled Nursing Facility Care | 4.1 (0.2) |
| Long-Term Facility Care | 3.7 (0.1) |
| Medicare Hospice Services | 2.3 (0.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Home Health Services are only presented in the Chartbook for beneficiaries who completed at least one Community interview during the year and are therefore excluded from this Table.

Table 4.2. User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community, 2018

| Measure | Estimate - % (St. Error) |
|--------------------------------------|--------------------------|
| Physician/Supplier Services | 96.2 (0.3) |
| Prescription Drugs | 94.0 (0.4) |
| Outpatient Hospital Services | 74.4 (0.8) |
| Dental Services | 53.4 (0.8) |
| Inpatient Hospital Services | 14.0 (0.5) |
| Medicare Home Health Services | 12.7 (0.5) |
| Medicare Hospice Services | 1.5 (0.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 4.3. User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community Overall and by Age, 2018

| Measure | Estimate - % (St. Error) | | | | |
|--------------------------------------|--------------------------|------------|-------------|-------------|------------|
| | Overall | <65 years | 65-74 years | 75-84 years | 85+ years |
| Physician/Supplier Services | 96.2 (0.3) | 95.4 (0.7) | 95.1 (0.5) | 98.1 (0.3) | 98.1 (0.4) |
| Prescription Drugs | 94.0 (0.4) | 93.6 (0.9) | 91.8 (0.7) | 97.4 (0.3) | 97.3 (0.4) |
| Outpatient Hospital Services | 74.4 (0.8) | 79.4 (1.7) | 70.2 (1.0) | 78.3 (1.2) | 79.0 (1.1) |
| Dental Services | 53.4 (0.8) | 38.0 (2.1) | 58.5 (1.2) | 55.5 (1.3) | 44.2 (1.6) |
| Inpatient Hospital Services | 14.0 (0.5) | 15.1 (1.3) | 10.8 (0.7) | 16.3 (0.8) | 22.7 (1.1) |
| Medicare Home Health Services | 12.7 (0.5) | 14.2 (1.4) | 7.4 (0.6) | 15.8 (0.8) | 29.6 (1.4) |
| Medicare Hospice Services | 1.5 (0.1) | * | * | 2.1 (0.3) | 7.2 (0.8) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for Medicare Hospice Services are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 4.4. User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community Overall and by Sex, 2018

| Measure | Estimate - % (St. Error) | | |
|--------------------------------------|--------------------------|------------|------------|
| | Overall | Female | Male |
| Physician/Supplier Services | 96.2 (0.3) | 96.7 (0.4) | 95.7 (0.4) |
| Prescription Drugs | 94.0 (0.4) | 94.7 (0.5) | 93.3 (0.6) |
| Outpatient Hospital Services | 74.4 (0.8) | 77.9 (1.0) | 70.4 (1.1) |
| Dental Services | 53.4 (0.8) | 55.0 (1.0) | 51.5 (1.1) |
| Inpatient Hospital Services | 14.0 (0.5) | 13.8 (0.6) | 14.2 (0.8) |
| Medicare Home Health Services | 12.7 (0.5) | 13.9 (0.6) | 11.3 (0.7) |
| Medicare Hospice Services | 1.5 (0.1) | 1.3 (0.2) | 1.7 (0.2) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 4.5. User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community Overall and by Race/Ethnicity, 2018

| Measure | Overall | Estimate - % (St. Error) | | |
|--------------------------------------|------------|--------------------------|--------------------|------------|
| | | White non-Hispanic | Black non-Hispanic | Hispanic |
| Physician/Supplier Services | 96.2 (0.3) | 96.7 (0.3) | 95.1 (1.0) | 93.3 (1.6) |
| Prescription Drugs | 94.0 (0.4) | 94.0 (0.5) | 94.9 (1.0) | 94.8 (1.5) |
| Outpatient Hospital Services | 74.4 (0.8) | 76.2 (0.9) | 73.2 (2.4) | 66.5 (2.5) |
| Dental Services | 53.4 (0.8) | 58.2 (0.9) | 31.5 (2.1) | 38.6 (2.3) |
| Inpatient Hospital Services | 14.0 (0.5) | 13.9 (0.6) | 17.2 (1.5) | 13.6 (1.7) |
| Medicare Home Health Services | 12.7 (0.5) | 12.1 (0.6) | 16.9 (1.6) | 16.3 (1.6) |
| Medicare Hospice Services | 1.5 (0.1) | 1.6 (0.1) | 1.6 (0.4) | 0.8 (0.2) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 4.6. User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community Overall and by Self-Reported Health Status, 2018

| Measure | Estimate - % (St. Error) | | |
|--------------------------------------|--------------------------|------------|--------------------------|
| | Overall | Fair/poor | Excellent/very good/good |
| Physician/Supplier Services | 96.2 (0.3) | 97.2 (0.6) | 96.0 (0.4) |
| Prescription Drugs | 94.0 (0.4) | 97.9 (0.5) | 92.9 (0.5) |
| Outpatient Hospital Services | 74.4 (0.8) | 81.6 (1.3) | 72.6 (0.9) |
| Dental Services | 53.4 (0.8) | 36.8 (1.7) | 59.3 (0.8) |
| Inpatient Hospital Services | 14.0 (0.5) | 20.5 (1.0) | 10.8 (0.5) |
| Medicare Home Health Services | 12.7 (0.5) | 21.9 (1.4) | 8.8 (0.4) |
| Medicare Hospice Services | 1.5 (0.1) | 1.4 (0.3) | 0.3 (0.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 4.7. User Rates of Selected Health Care Services Among Medicare Beneficiaries Living Only in the Community with Fee-for-Service Coverage, 2018

| Measure | Estimate - % (St. Error) |
|--------------------------------------|--------------------------|
| Physician/Supplier Services | 96.0 (0.4) |
| Prescription Drugs | 92.6 (0.6) |
| Outpatient Hospital Services | 76.0 (1.0) |
| Dental Services | 56.0 (1.0) |
| Inpatient Hospital Services | 14.9 (0.7) |
| Medicare Home Health Services | 12.7 (0.6) |
| Medicare Hospice Services | 1.2 (0.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year and had Medicare Fee-for-Service coverage. Beneficiaries who received a Community interview answered questions themselves or by proxy.

Table 4.8. User Rates of Skilled Nursing Facility Care Among All Medicare Beneficiaries Overall and by Age, Sex, Race/Ethnicity, and Health Status, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|-----------------------|--------------------------|--------------------------|
| Overall | -- | 4.1 (0.2) |
| Age | <65 years | 3.0 (0.6) |
| | 65-74 years | 2.3 (0.3) |
| | 75-84 years | 5.0 (0.4) |
| | 85+ years | 10.8 (0.8) |
| Sex | Female | 4.9 (0.3) |
| | Male | 3.1 (0.3) |
| Race/Ethnicity | White non-Hispanic | 4.2 (0.3) |
| | Black non-Hispanic | 4.4 (0.7) |
| | Hispanic | 3.0 (0.8) |
| Health Status | Fair/poor | 7.0 (0.6) |
| | Excellent/very good/good | 2.4 (0.2) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 4.9. User Rates of Long-Term Facility Care Among All Medicare Beneficiaries Overall and by Age, Sex, Race/Ethnicity, and Health Status, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|-----------------------|--------------------------|--------------------------|
| Overall | -- | 3.7 (0.1) |
| Age | <65 years | 2.9 (0.4) |
| | 65-74 years | 1.1 (0.2) |
| | 75-84 years | 3.8 (0.3) |
| | 85+ years | 15.9 (0.8) |
| Sex | Female | 4.4 (0.2) |
| | Male | 2.8 (0.2) |
| Race/Ethnicity | White non-Hispanic | 4.0 (0.2) |
| | Black non-Hispanic | 3.6 (0.6) |
| | Hispanic | 2.1 (0.4) |
| Health Status | Fair/poor | 7.6 (0.5) |
| | Excellent/very good/good | 1.6 (0.1) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported utilization for beneficiaries enrolled in Fee-for-Service plans, utilization reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 5.1.a. Total Health Care Service Expenditures Among All Medicare Beneficiaries by Source of Payment, 2018

| Measure | Estimate - % (St. Error) |
|----------------------|--------------------------|
| Medicare | 65.1 (0.8) |
| Out-of-Pocket | 17.1 (0.5) |
| Private | 7.6 (0.5) |
| Medicaid | 6.0 (0.4) |
| Other Source | 4.1 (0.2) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost Supplement File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 5.1.b. Total Health Care Service Expenditures Among All Medicare Beneficiaries Overall and for Selected Service Types, in Millions of Dollars, 2018

| Measure | Estimate - \$ (St. Error) |
|--------------------------------------|---------------------------|
| Prescription Drugs | 253,503 (13,062) |
| Physician/Supplier Services | 224,692 (5,985) |
| Inpatient Hospital Services | 183,300 (8,786) |
| Outpatient Hospital Services | 129,795 (6,310) |
| Long-Term Facility Care | 102,888 (5,176) |
| Skilled Nursing Facility Care | 37,922 (2,888) |
| Dental Services† | 35,383 (1,391) |
| Medicare Hospice Services | 17,400 (1,509) |
| Total Expenditures | 1,008,072 (22,827) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.† Dental services expenditures are only available for those who completed at least one Community interview in the year. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources. Estimates for Medicare Home Health Services are only presented in the Chartbook for beneficiaries who completed at least one Community interview during the year and are therefore excluded from this Table.

Table 5.2. Distribution of Total Out-of-Pocket Health Care Service Expenditures Among All Medicare Beneficiaries, 2018

| Measure | Measure Category | Estimate - % (St. Error) |
|--|-------------------|--------------------------|
| Beneficiary Spending Percentage Group | Top 5 percent | 34.9 (2.0) |
| | Top 10 percent | 49.2 (2.0) |
| | Top 15 percent | 60.5 (2.1) |
| | Top 20 percent | 68.7 (2.2) |
| | Top 50 percent | 92 (2.3) |
| | Bottom 50 percent | 8 (0.2) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: Percentages may not sum to 100 percent due to rounding. For definitions of key terms and information on the construction of measures, see the Appendices. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 5.3. Total Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) |
|--------------------------------------|---------------------------|
| Prescription Drugs | 4,144 (221) |
| Physician/Supplier Services | 3,652 (100) |
| Inpatient Hospital Services | 2,847 (148) |
| Outpatient Hospital Services | 2,108 (110) |
| Dental Services | 601 (24) |
| Medicare Home Health Services | 343 (34) |
| Medicare Hospice Services | 168 (21) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.4. Total Out-of-Pocket Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) |
|--------------------------------------|---------------------------|
| Physician/Supplier Services | 689 (24) |
| Prescription Drugs | 598 (17) |
| Dental Services | 460 (23) |
| Outpatient Hospital Services | 134 (6) |
| Inpatient Hospital Services | 50 (4) |
| Medicare Home Health Services | * |
| Medicare Hospice Services | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Estimates for Medicare Home Health Services and Medicare Hospice Services are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 5.5. Total Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community Overall and by Age, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) | | | | |
|--------------------------------------|---------------------------|---------------|-------------|-------------|-------------|
| | Overall | <65 years | 65-74 years | 75-84 years | 85+ years |
| Prescription Drugs | 4,144 (221) | 9,006 (1,222) | 3,305 (265) | 3,458 (224) | 3,058 (272) |
| Physician/Supplier Services | 3,652 (100) | 3,450 (213) | 3,172 (130) | 4,432 (197) | 4,387 (194) |
| Inpatient Hospital Services | 2,847 (148) | 3,063 (387) | 2,300 (245) | 3,358 (216) | 4,012 (291) |
| Outpatient Hospital Services | 2,108 (110) | 2,830 (314) | 1,818 (194) | 2,334 (149) | 1,934 (140) |
| Dental Services | 601 (24) | 339 (46) | 647 (37) | 702 (46) | 493 (46) |
| Medicare Home Health Services | 343 (34) | 266 (62) | 146 (22) | 355 (29) | 1,443 (288) |
| Medicare Hospice Services | 168 (21) | * | * | 219 (50) | 884 (145) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for Medicare Hospice Services are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.6. Total Health Care Service per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community Overall and by Sex, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) | | |
|--------------------------------------|---------------------------|-------------|-------------|
| | Overall | Female | Male |
| Prescription Drugs | 4,144 (221) | 3,725 (177) | 4,626 (423) |
| Physician/Supplier Services | 3,652 (100) | 3,670 (130) | 3,633 (123) |
| Inpatient Hospital Services | 2,847 (148) | 2,643 (146) | 3,082 (241) |
| Outpatient Hospital Services | 2,108 (110) | 2,072 (139) | 2,149 (169) |
| Dental Services | 601 (24) | 612 (30) | 589 (37) |
| Medicare Home Health Services | 343 (34) | 391 (42) | 289 (41) |
| Medicare Hospice Services | 168 (21) | 190 (33) | 142 (29) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.7. Total Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community Overall and by Race/Ethnicity, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) | | | |
|--------------------------------------|---------------------------|--------------------|--------------------|---------------|
| | Overall | White non-Hispanic | Black non-Hispanic | Hispanic |
| Prescription Drugs | 4,144 (221) | 3,887 (191) | 4,693 (676) | 5,776 (1,542) |
| Physician/Supplier Services | 3,652 (100) | 3,868 (118) | 3,086 (254) | 3,045 (311) |
| Inpatient Hospital Services | 2,847 (148) | 2,767 (150) | 3,662 (617) | 3,099 (534) |
| Outpatient Hospital Services | 2,108 (110) | 2,093 (134) | 2,680 (427) | 1,838 (281) |
| Dental Services | 601 (24) | 686 (31) | 242 (41) | 313 (42) |
| Medicare Home Health Services | 343 (34) | 341 (35) | 322 (49) | * |
| Medicare Hospice Services | 168 (21) | 170 (28) | * | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for Medicare Home Health Services and Medicare Hospice Services are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.8. Total Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community Overall and by Self-Reported Health Status, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) | | |
|--------------------------------------|---------------------------|-------------|--------------------------|
| | Overall | Fair/poor | Excellent/very good/good |
| Prescription Drugs | 4,144 (221) | 7,575 (911) | 3,155 (146) |
| Physician/Supplier Services | 3,652 (100) | 4,556 (198) | 3,337 (106) |
| Inpatient Hospital Services | 2,847 (148) | 4,557 (471) | 1,927 (125) |
| Outpatient Hospital Services | 2,108 (110) | 3,000 (228) | 1,834 (132) |
| Dental Services | 601 (24) | 383 (30) | 686 (31) |
| Medicare Home Health Services | 343 (34) | 576 (71) | 221 (28) |
| Medicare Hospice Services | 168 (21) | 272 (70) | * |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for Medicare Hospice Services are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.9. Total Out-of-Pocket Health Care Service Expenditures per Capita for Selected Service Types Among Medicare Beneficiaries Living Only in the Community with at Least One Chronic Condition by Number of Chronic Conditions, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) | | | | |
|--------------------------------------|---------------------------|-------------|----------------|----------------|----------------------|
| | Overall | 1 condition | 2-3 conditions | 4-5 conditions | 6 or more conditions |
| Prescription Drugs | 4,144 (221) | 1,931 (317) | 2,695 (256) | 5,345 (516) | 6,755 (436) |
| Physician/Supplier Services | 3,652 (100) | 2,081 (235) | 3,085 (112) | 4,283 (183) | 5,186 (262) |
| Inpatient Hospital Services | 2,847 (148) | * | 1,535 (159) | 3,165 (263) | 4,990 (565) |
| Outpatient Hospital Services | 2,108 (110) | 696 (86) | 1,822 (259) | 2,341 (169) | 3,607 (332) |
| Dental Services | 601 (24) | 681 (84) | 693 (42) | 642 (53) | 424 (32) |
| Medicare Home Health Services | 343 (34) | * | 161 (25) | 314 (32) | 825 (134) |
| Medicare Hospice Services | 168 (21) | * | * | * | 419 (108) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who only completed Community interviews during the year. This excludes beneficiaries for whom any Facility interview was completed. Beneficiaries who received a Community interview answered questions themselves or by proxy. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for Inpatient Hospital Services, Medicare Home Health Services, and Medicare Hospice Services are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix.

Table 5.10. Skilled Nursing Facility Care Health Care Service Expenditures per User Overall and by Age, Sex, Race/Ethnicity, and Health Status, in Dollars, 2018

| Measure | Measure Category | Estimate - \$ (St. Error) |
|-----------------------|--------------------------|---------------------------|
| Overall | -- | 15,364 (900) |
| Age | <65 years | * |
| | 65-74 years | 13,053 (1,845) |
| | 75-84 years | 13,833 (1,273) |
| | 85+ years | 18,367 (1,286) |
| Sex | Female | 16,287 (1,191) |
| | Male | 13,691 (1,325) |
| Race/Ethnicity | White non-Hispanic | 15,704 (1,022) |
| | Black non-Hispanic | * |
| | Hispanic | * |
| Health Status | Fair/poor | 16,818 (1,526) |
| | Excellent/very good/good | 13,846 (1,143) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Estimates are not presented for the "other race/ethnicity" category. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for age and race/ethnicity are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.11. Long-Term Facility Care Health Care Service Expenditures per User Overall and by Age, Sex, Race/Ethnicity, and Health Status, in Dollars, 2018

| Measure | Measure Category | Estimate - \$ (St. Error) |
|-----------------------|--------------------------|---------------------------|
| Overall | -- | 45,786 (1,461) |
| Age | <65 years | 46,649 (5,723) |
| | 65-74 years | 49,179 (4,400) |
| | 75-84 years | 44,675 (3,016) |
| | 85+ years | 45,200 (1,833) |
| Sex | Female | 48,501 (1,939) |
| | Male | 40,820 (1,806) |
| Race/Ethnicity | White non-Hispanic | 44,347 (1,547) |
| | Black non-Hispanic | 50,083 (4,488) |
| | Hispanic | * |
| Health Status | Fair/poor | 55,266 (2,266) |
| | Excellent/very good/good | 49,841 (2,251) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Some estimates for race/ethnicity are not presented due to suppression and are represented by an asterisk (*) in the table. For more information about suppression guidelines, see the Technical Appendix. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.12. Total Out-of-Pocket Health Care Service Expenditures per User for Long-Term Facility Care and Skilled Nursing Facility Care, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) |
|--------------------------------------|---------------------------|
| Long-Term Facility Care | 21,315 (929) |
| Skilled Nursing Facility Care | 1,672 (255) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information.

Table 5.13. Total Health Care Service Expenditures per User for Long-Term Facility Care and Skilled Nursing Facility Care, in Dollars, 2018

| Measure | Estimate - \$ (St. Error) |
|--------------------------------------|---------------------------|
| Long-Term Facility Care | 45,786 (1,461) |
| Skilled Nursing Facility Care | 15,364 (900) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018 and Cost Supplement File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented only for beneficiaries who used a given service at least once in the data collection year. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. Health care service expenditures presented do not reflect the amount paid by beneficiaries, but rather the amount paid by all sources.

Table 5.14. Annual Out-of-Pocket Medicare Premium Expenditures per Capita Among Medicare Beneficiaries Who Are Not Dual Eligible Overall and by Age, Type of Medicare Coverage, and Health Status, in Dollars, 2018

| Measure | Measure Category | Estimate - \$ (St. Error) |
|----------------------------------|--------------------------|---------------------------|
| Overall | -- | 1,852 (21) |
| Age | <65 years | 1,477 (57) |
| | 65-74 years | 1,814 (31) |
| | 75-84 years | 1,991 (22) |
| | 85+ years | 1,970 (26) |
| Type of Medicare Coverage | Traditional FFS Medicare | 1,785 (25) |
| | Medicare Advantage | 1,975 (30) |
| Health Status | Poor | 1,859 (63) |
| | Fair | 1,794 (40) |
| | Good | 1,843 (30) |
| | Very good | 1,889 (32) |
| | Excellent | 1,939 (49) |

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Survey File, 2018.

NOTES: For definitions of key terms and information on the construction of measures, see the Appendices. Estimates are presented for beneficiaries who are not dual eligible for both Medicare and Medicaid. Beneficiaries who are classified as dual eligible can be either partial- or full-benefit dual eligible. Beneficiaries who received a Community interview answered questions themselves or by proxy. A facility staff member, such as a nurse, always answered questions about the beneficiary for Facility interviews. Unlike survey reported spending for beneficiaries enrolled in Fee-for-Service plans, spending reported for those enrolled in Medicare Advantage plans is not matched to administrative records to assess accuracy. These estimates, therefore, should be interpreted with caution. Please refer to the *Data User's Guide: Cost Supplement File* for more information. FFS stands for Fee-for-Service.

APPENDICES

APPENDICES

APPENDIX A: GLOSSARY

This Glossary provides an explanation of key terms and defines the measures for which estimates are presented in this Chartbook. Unless noted in the Glossary as coming from *administrative* sources, the variables used to create the Chartbook measures come from survey-reported data. For more information about the construction of Chartbook measures, please consult Appendix C: Measure Construction Appendix.

Age: Age is obtained from *administrative* data sources.

Alcohol use: Information on alcohol use is collected only for beneficiaries who completed at least one Community interview during the year. Community respondents were asked how many drinks, on average, they consumed on days that they drank alcoholic beverages in the past 12 months. The level of alcohol use is based on sex of the beneficiary. Men who consumed more than two alcoholic beverages per day on average were categorized as heavy drinkers. Those who consumed an average of one or two per day were categorized as moderate drinkers, and those who did not drink were categorized as nondrinkers. For women, those who consumed two or more drinks per day were categorized as heavy drinkers, those who consumed an average of one per day were categorized as moderate drinkers, and those who did not drink were categorized as nondrinkers. Alcohol use is not recorded in the Facility interview.

Alzheimer's disease: Community respondents were asked whether a doctor or other health professional had ever told them that they had Alzheimer's disease. Beneficiaries living in a facility were coded as either having or not having Alzheimer's disease based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Arthritis: Arthritis is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional had ever told them that they had rheumatoid arthritis, osteoarthritis, or any other form of arthritis. Beneficiaries living in a facility were coded as either having or not having arthritis, osteoarthritis, or gout based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The arthritis measure counts the presence of at least one of these conditions. Beneficiaries who have more than one condition are only counted once for the purposes of calculating the proportion of beneficiaries with arthritis.

Beneficiary: Beneficiary refers to a person receiving Medicare services who may or may not be participating in the MCBS. Beneficiary may also refer to an individual selected from the MCBS sample about whom the MCBS collects information. Beneficiaries must meet at least one of three criteria for Medicare eligibility (is aged 65 years or over, is under age 65 with certain disabilities, or is of any age with End-Stage Renal Disease) and be entitled to health insurance benefits. (Source: <https://www.cms.gov/Medicare/Medicare-General-Information/MedicareGenInfo/index.html>)

Blood pressure screening: Blood pressure screening is collected only for beneficiaries who completed at least one Community interview during the year. Community respondents were asked

when was the most recent time they had a blood pressure screening taken by a doctor or other health professional. Beneficiaries were coded as “yes” for blood pressure screening if they received at least one screening in the last 12 months. Receipt of blood pressure screening is not recorded in the Facility interview.

Brief Interview for Mental Status (BIMS): The Brief Interview for Mental Status (BIMS) is a short interview used in the Long-Term Care Minimum Data Set (MDS) for assessing the mental status of long-term care facility residents. The interview contains a series of questions related to immediate recall of three words, temporal orientation (to correct month, year, and day), and delayed recall of three words, with a maximum score of 15 across the three components. Lower BIMS scores indicate greater cognitive impairment.

Cancer, other than skin cancer: Community respondents were asked whether a doctor or other health professional had ever told them that they had any kind of cancer, malignancy, or tumor other than skin cancer. For beneficiaries living in the community, cancer (other than skin cancer) includes benign or non-malignant tumors or growths. Beneficiaries living in a facility were coded as either having or not having cancer (other than skin cancer) based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Chronic conditions: Chronic conditions comprises a group of 14 Chartbook health conditions measures: heart disease, cancer (other than skin cancer), Alzheimer’s disease, dementia other than Alzheimer’s disease, depression, mental condition, hypertension, diabetes, arthritis, osteoporosis/broken hip, pulmonary disease, stroke, high cholesterol, and Parkinson’s disease. It is possible for a beneficiary to have “ever” been diagnosed with both Alzheimer’s disease and dementia (other than Alzheimer’s disease) as previous survey responses are carried forward into subsequent data years. For the purposes of the number of chronic conditions measure, Alzheimer’s disease and dementia (other than Alzheimer’s disease) are counted as one chronic condition for beneficiaries diagnosed with both conditions. As the Chartbook definition of mental condition encompasses depression, for the purposes of the number of chronic conditions measure depression and mental condition are counted as one chronic condition for beneficiaries diagnosed with both conditions.

Claim-only event: A claim-only event is a medical service or event known only through the presence of a Medicare Fee-for-Service claim from *administrative* data. This means that the event represented in the data could not be reconciled with a corresponding survey-reported event.

Cognitive impairment: Cognitive impairment is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether they have serious difficulty concentrating, remembering, or making decisions. If a beneficiary had serious difficulty with any of these measures of cognitive functioning, the person was categorized as cognitively impaired. Beneficiaries living in a facility for whom a Brief Interview for Mental Status (BIMS) was conducted were coded as having a cognitive impairment if they received a score of 12 or lower. A beneficiary living in a facility for whom a BIMS was not conducted was categorized as cognitively impaired if they were reported as having problems with their short term or long term memory, recalling the current season, recalling the location of their room, recalling names and faces, recalling that they are in a nursing home, making decisions, their ability to make themselves understood, and their ability to understand others. In addition, a beneficiary living in a facility was categorized as cognitively impaired if they were indicated to have a diagnosis of aphasia based on information on active diagnoses provided by Facility staff or as abstracted by medical records. The cognitive impairment measure counts the presence of at least one indicator of cognitive impairment. Beneficiaries who have more than one indicator are only counted once for the purposes of calculating the proportion of beneficiaries with cognitive impairment.

Community interview: Survey administered for beneficiaries living in the community (i.e., not in a long-term care facility such as a nursing home) during the reference period covered by the MCBS interview. An interview may be conducted with the beneficiary or a proxy.

Delayed care due to cost: Delayed care due to cost is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. Community respondents were asked if, in the last year, they had delayed seeking medical care because they were worried about the cost. Delayed care due to cost is not recorded in the Facility interview.

Dementia, other than Alzheimer's disease: Community respondents were asked whether a doctor or other health professional had ever told them that they had any type of dementia (other than Alzheimer's disease). Beneficiaries living in a facility were coded as either having or not having dementia (other than Alzheimer's disease) based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Dental services: Dental services encompass services rendered during dental visits in the data collection year, including cleanings, x-rays, and exams. Dental services utilization data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Dental services usage was reported during a Community or Facility interview. Dental services expenditures data are only available for beneficiaries who completed a Community interview. Dental services expenditures were reported during a Community interview. Fee-for-Service Medicare does not cover most dental services, only a limited number of dental services that are received in a hospital setting. For a small number of beneficiaries enrolled in Fee-for-Service Medicare who received one of these covered services during the data collection year, utilization and expenditures data for these services were obtained from *administrative* data sources.

Depression: Community respondents were asked whether a doctor or other health professional had ever told them that they had depression. Beneficiaries living in a facility were coded as either having or not having depression based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Diabetes: Community respondents were asked whether a doctor or other health professional had ever told them that they had any type of diabetes. Beneficiaries living in a facility were coded as either having or not having diabetes based on information on active diagnoses provided by Facility staff or as abstracted from medical records. In this Chartbook, diabetes encompasses Type I, Type II, borderline diabetes, prediabetes, gestational diabetes, and high blood sugar.

Difficulty obtaining care: Difficulty obtaining care is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. Community respondents were asked if, in the last year, they had any trouble getting health care that they wanted or needed. Difficulty obtaining care is not recorded in the Facility interview.

Disability status: Disability status is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether they have serious difficulty hearing, seeing, concentrating, remembering, or making decisions, walking or climbing stairs, dressing or bathing, or with errands. Beneficiaries living in the community who had no serious difficulties with these activities were included in the category "No disability." Beneficiaries living in the community who had a serious difficulty in one area were categorized as "One disability" and those who had a serious difficulty in more than one area were categorized as "Two or more disabilities." Beneficiaries living in a facility were included in the category "LTC Facility."

Education: Level of education corresponds to the highest school grade completed, as reported by the beneficiary, their proxy, or Facility staff.

End-stage renal disease (ESRD): End-stage renal disease is the state of kidney impairment that is irreversible, cannot be controlled by conservative management alone, and requires dialysis or kidney transplantation to maintain life.

Facility interview: Survey administered for beneficiaries living in facilities, such as long-term care nursing homes or other institutions, during the reference period covered by the MCBS interview. Interviewers conduct the Facility interview with staff members located at the facility (i.e., facility respondents); beneficiaries are not interviewed if they reside at a facility.

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.

Flu shot: Receipt of flu shot is presented in the Chartbook only for beneficiaries who completed at least one Community interview during the year. Community respondents were asked whether they had received a seasonal flu shot in the past year. Receipt of flu shot is not estimated in this Chartbook for beneficiaries living in a facility.

Health status: Health status is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked to rate their general health compared to other people of the same age. Beneficiaries who completed a Community interview answered health status questions themselves, unless they were unable to do so. A Facility staff member answered questions about the beneficiary's health status for Facility interviews.

Hearing trouble: Hearing trouble is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether they use a hearing aid or if they have at least a little trouble hearing. Beneficiaries living in a facility were coded as using or not using a hearing aid, and having or not having more than minimal difficulty with hearing. The hearing trouble measure counts the presence of at least one indicator of hearing trouble. Beneficiaries who have more than one indicator are only counted once for the purposes of calculating the proportion of beneficiaries with hearing trouble.

Heart disease: Heart disease is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional had ever told them that they had myocardial infarction (heart attack), angina pectoris or coronary heart disease, congestive heart failure, or any other heart condition. Beneficiaries living in a facility were coded as either having or not having myocardial infarction (heart attack), coronary artery disease, congestive heart failure, aortic stenosis, or atrial fibrillation/other dysrhythmias based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The heart disease measure counts the presence of at least one of these conditions. Beneficiaries who have more than one condition are only counted once for the purposes of calculating the proportion of beneficiaries with heart disease.

High cholesterol: High cholesterol is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional has told them that they have high cholesterol. Beneficiaries living in a facility were coded as either having or not having hypercholesterolemia or hyperlipidemia based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Hypertension: Community respondents were asked whether a doctor or other health professional has ever told them that they had hypertension or high blood pressure. Beneficiaries living in a facility were coded as either having or not having hypertension based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Hysterectomy: Hysterectomy is presented in the Chartbook only for beneficiaries who completed at least one Community interview during the year. Female Community respondents were asked if they had ever received a hysterectomy. Hysterectomy is not estimated in this Chartbook for beneficiaries living in a facility.

Inpatient hospital services: Inpatient hospital expenses include charges for an emergency room visit that resulted in an inpatient admission. Inpatient hospital events are included in the Cost Supplement File if the discharge date for the inpatient hospital stay was in the data collection year. Inpatient hospital services data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Inpatient hospital services usage and expenditures were reported during a Community interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from administrative data sources.

Insurance coverage:

- Comprehensive Coverage: Comprehensive health insurance is insurance that provides coverage for a wide range of health care needs. Single service plans, such as dental or vision plans, are not considered to be comprehensive.
- Dual eligible status: Annual Medicare-Medicaid dual eligibility is based on the state Medicare Modernization Act (MMA) files. Beneficiaries are considered “dual eligible” and assigned a dual eligible status if they are enrolled in Medicaid for at least one month. Specific Medicaid eligibility (full, partial, or QMB) is determined by the beneficiary’s status in the last month of the year in which he or she qualified as dually eligible. This information is obtained from *administrative* data sources.
- Employer-sponsored insurance (ESI): Employer-sponsored private insurance encompasses beneficiaries who reported coverage through the policy holder’s employer or union, or deceased spouse’s previous employer or union. Information on employer-sponsored insurance coverage is collected only for beneficiaries who completed at least one Community interview during the year. Employer-sponsored insurance coverage is not estimated in this Chartbook for beneficiaries living in a facility.
- 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). Beneficiaries were coded as having Medicare Advantage coverage if they had coverage for one or more months out of the calendar year. This information is obtained from *administrative* data sources.
- Part D coverage: Additional, optional coverage for prescription drugs administered by private companies. Beneficiaries were coded as having Part D coverage if they had coverage for one or more months out of the calendar year. This information is obtained from *administrative* data sources.
- Self-pay insurance: Self-pay insurance encompasses beneficiaries eligible for Part A and/or Part B Medicare benefits who had self-purchased private insurance plans, such as “Medigap” insurance. This category includes types of private general insurance and managed care plans obtained directly by the beneficiary or through the American Association of Retired Persons (AARP). Information on self-pay insurance coverage is collected only for beneficiaries who completed at least one Community interview during the year. Self-pay insurance coverage is not estimated in this Chartbook for beneficiaries living in a facility.
- Supplemental private insurance: Supplemental private insurance encompasses beneficiaries living in the community who reported coverage provided through an employer or union or coverage purchased directly from an insurance company – either alone or in combination with another type of coverage. It also encompasses beneficiaries living in a facility who have any type of private health insurance.
- Traditional Fee-for-Service Medicare: Traditional Fee-for-Service Medicare encompasses beneficiaries eligible for Part A and/or Part B Medicare benefits at any time during the data collection year, and who were not enrolled in a Medicare Advantage plan at any time during the year. However, beneficiaries may have had Medicaid coverage or other public insurance coverage, such as a state-sponsored prescription drug plan, or may have been eligible for Department of Veterans Affairs health care benefits. Beneficiaries enrolled in traditional Fee-for-Service coverage may also have supplemental private insurance coverage. Coverage status is indicated for records for which *administrative* data are available.

Intellectual or developmental disability: Intellectual or developmental disability is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional had ever told them that they had an intellectual disability. Beneficiaries living in a facility were coded as either having or not having Down syndrome based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Language other than English spoken at home: Language other than English spoken at home is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. Community respondents were asked if they speak a language other than English at home. Language other than English spoken at home is not recorded in the Facility interview.

Long-Term Care Minimum Data Set (MDS): The Long-Term Care 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>.

Long-term facility care: A long-term care facility provides rehabilitative, restorative, and/or ongoing skilled nursing care to patients or residents in need of assistance with activities of daily living. The MCBS definition of facility specifies that a long-term care facility must have three or more long-term care beds, and provide either personal care services to residents, continuous supervision of residents, or long-term care services throughout the facility or in a separately identifiable unit. Types of long-term care facilities include licensed nursing homes, intermediate care facilities, retirement homes, domiciliary or personal care facilities, distinct long-term care units in a hospital complex, mental health facilities and centers, assisted and foster care homes, and institutions for the intellectually and developmentally disabled. Long-term facility care stays are included in the Cost Supplement File if a beneficiary had a long-term care facility stay of at least one day during the data collection year. If the beneficiary was still in the facility at the end of the year, the stay is not complete, but all data for the data collection year are included. Expenditures for long-term care in facilities include facility room and board expenses and charges for ancillary services for beneficiaries for whom at least one Facility interview was completed during the year. Expenditures for long-term facility care were reported during a Facility interview, and through a combination of Medicare *administrative* data and imputations. For more information on collection of long-term facility care expenditures, see the *2018 MCBS Methodology Report* available on the CMS MCBS website.

Mammogram: Receipt of mammogram is presented in the Chartbook only for beneficiaries who completed at least one Community interview during the year. Female Community respondents were asked if they received a mammogram or breast X-ray in the past year. Receipt of mammogram is not estimated in this Chartbook for beneficiaries living in a facility.

Medicare beneficiary: See Beneficiary.

Medicare home health services: Medicare home health services are presented in the Chartbook only for beneficiaries who completed at least one Community interview during the year. Home health care services are narrowly defined in the MCBS Limited Data Set files (LDS). Home health care is limited to skilled nursing services and other therapeutic services provided by a Medicare participating home health agency. In the MCBS, home health use represents events where medical care, as opposed to personal care and support, was furnished to the beneficiary in the data collection year. Medicare home health services usage and expenditures were reported during a Community interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources.

Medicare hospice services: Hospice services are narrowly defined in the MCBS Limited Data Set files (LDS). Hospice care is limited to Medicare-covered services for terminally ill individuals who have elected to receive hospice care rather than standard Medicare benefits. Hospice services include medical, nursing, counseling, and other supportive services rendered to terminally ill people and their families in the data collection year. Hospice care is intended to be palliative and to improve quality of life rather than to cure disease or extend life. Almost all services provided to the hospice beneficiary are fully covered by Medicare. Two exceptions are prescribed medicines and inpatient respite care. These two types of services require a small copayment. Medicare hospice services data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Medicare hospice services usage and expenditures were reported during a Community interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources.

Mental condition: Mental condition is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional had ever told them that they had depression or a mental or psychiatric disorder other than depression. Beneficiaries living in a facility were coded as either having or not having manic depression (bipolar disorder), schizophrenia, depression, an anxiety disorder, post-traumatic stress disorder (PTSD), atypical psychosis, delusions, a psychotic disorder other than schizophrenia, or a previous history of mental illness based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The mental condition measure counts the presence of at least one of these conditions. Beneficiaries who have more than one condition are only counted once for the purposes of calculating the proportion of beneficiaries with a mental condition.

Metropolitan area resident: Metropolitan area residence was obtained from *administrative* data sources and verified in the survey.

Mobility limitation: Community respondents were asked how much difficulty they have walking a quarter of a mile; about two or three blocks. For Facility interviews, a Facility staff member answered questions about the beneficiary's ability to walk a quarter of a mile. If the beneficiary had a little, some, or a lot of difficulty, or could not walk a quarter of a mile, the response was coded as "yes." The response reflects whether the beneficiary usually had trouble walking a quarter of a mile, rather than temporary difficulty, such as from a short-term injury.

Mortality rate: Mortality rate is defined as the number of deaths divided by the total number of Medicare beneficiaries. Mortality is determined by the date of death, which is obtained from *administrative* data sources.

Osteoporosis/broken hip: Community respondents were asked whether a doctor or other health profession has ever told them that they had osteoporosis or a broken hip. Beneficiaries living in a facility were coded as either having or not having osteoporosis or hip fracture based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The osteoporosis/broken hip measure counts the presence of at least one of these conditions. Beneficiaries who have more than one condition are only counted once for the purposes of calculating the proportion of beneficiaries with osteoporosis/broken hip.

Out-of-pocket Medicare premium expenditures: Out-of-pocket Medicare premium expenditures are presented in the Chartbook for beneficiaries who are not dual eligible. Medicare premium expenditures encompass annual premium amounts paid by a beneficiary for Medicare Parts A, B, C, and D. Medicare premium expenditures are obtained from *administrative* data sources.

Outpatient hospital services: Outpatient hospital services encompass services rendered during visits to any part of an outpatient department or outpatient clinic at a hospital in the data collection year. Outpatient hospital events include emergency room visits that did not result in an inpatient hospital admission. Outpatient hospital services data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Outpatient hospital services usage was reported during a Community or Facility interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources. Outpatient hospital services expenditures were reported during a Community interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources.

Parkinson's disease: Community respondents were asked whether a doctor or other health professional had ever told them that they had Parkinson's disease. Beneficiaries living in a facility were coded as either having or not having Parkinson's disease based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Per capita expenditure: Per capita expenditures are presented in the Chartbook for beneficiaries who completed only Community interviews during the year. The per capita expenditure is defined as the mean expenditure per Medicare beneficiary during the data collection year.

Perceived knowledge of the Medicare program: Perceived knowledge of the Medicare program is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. Community respondents were asked how much they think they know about the Medicare program; just about everything they need to know, most of what they need to know, some of what they need to know, a little of what they need to know, of almost none of what they need to know. Perceived knowledge of the Medicare program is not recorded in the Facility interview.

Persons who provide assistance communicating with medical provider: Information regarding persons who provide assistance communicating with medical providers is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. This information is collected during the Community interview for beneficiaries who self-reported limited English proficiency and speak a language other than English at home. These respondents were asked who helps them communicate with medical providers, other than their usual provider, who do not speak the language the beneficiary speaks at home. Assistance communicating with medical provider is not recorded in the Facility interview.

Per user expenditure: Per user expenditures are presented in the Chartbook for skilled nursing facility users and long-term care facility users. The per-user expenditure is defined as the mean expenditure per service user during the data collection year.

Physical activity: Level of physical activity is determined only for beneficiaries who completed at least one Community interview during the year. Physical activity is based on a beneficiary's self-reported level of physical activity in response to two Community interview questions. Community respondents were asked how much time they spend in a typical week doing vigorous activities such as team sports, running, aerobics, heavy house or yard work, or anything else that causes large increases in breathing or heart rate. Community respondents were also asked how much time they spend in a typical week doing moderate activities, such as brisk walking, bicycling, gardening, golf, swimming, vacuuming, or anything else that causes small increases in breathing or heart rate. If a beneficiary reports an hour or less of vigorous activity or two or fewer hours of moderate activity per week, he/she is categorized as sedentary. If a beneficiary engages in two hours of vigorous activity or three to four hours of moderate activity per week, he/she is categorized as active. If a beneficiary engages in three or more hours of vigorous activity or five or more hours of moderate activity per week, then the beneficiary is categorized as highly active. Physical activity is not recorded in the Facility interview.

Physician/supplier services: Physician/supplier services include medical doctor, osteopathic doctor, and health practitioner visits; diagnostic laboratory and radiology services; medical and surgical services; durable medical equipment; and nondurable medical supplies delivered or occurring during the data collection year. Health practitioners include physicians, audiologists, optometrists, chiropractors, podiatrists, mental health professionals, therapists, nurses, paramedics, and physician's assistants. Physician/supplier services data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Physician/supplier services usage was reported during a Community or Facility interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources. Physician/supplier services expenditures were reported during a Community interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources.

Physician wait time: Physician wait time is collected only for beneficiaries who completed at least one Community interview during the year. Community respondents were asked the number of days that they had to wait to see a doctor for their most recent appointment that was not at home or at a hospital. Physician wait time is not recorded in the Facility interview.

Pneumonia shot: Receipt of pneumonia shot is presented in the Chartbook only for beneficiaries who completed at least one Community interview during the year. Community respondents were asked if they had ever received the pneumonia shot. Receipt of pneumonia shot is not estimated in this Chartbook for beneficiaries living in a facility.

Poverty status: Responses to income and asset questions are self-reported by the respondent. Poverty status is determined using an income-to-poverty ratio (IPR). The IPR is defined as income divided by the appropriate Federal Poverty Level (FPL) threshold. Note that the MCBS IPR is calculated only for household sizes of one (beneficiary living alone or in a facility) or two (beneficiary living with spouse only). Beginning in 2017, the income poverty thresholds presented in the Chartbook reflect the Medicare beneficiary thresholds.

Preferred language for medical care: Preferred language for medical care is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. This information is collected during the Community interview for beneficiaries who speak a language other than English at home and have a usual doctor or clinic where they receive medical care. These respondents were asked in which language they prefer to receive medical care. Preferred language for medical care is not recorded in the Facility interview.

Prescription drugs: Prescription drug services encompass drugs purchased during the data collection year; but prescription drugs administered during an inpatient hospital stay are not included. Prescription drug services data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Prescription drug usage and expenditures were reported during a Community interview or, for beneficiaries enrolled in Medicare Part D, obtained from *administrative* data sources.

Problem understanding a medical situation due to a language barrier: Problem understanding a medical situation due to a language barrier is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. This information is collected during the Community interview for beneficiaries who self-reported limited English proficiency and speak a language other than English at home. These respondents were asked if they had ever had a problem understanding a medical situation because it was not explained in the language the beneficiary speaks at home. Problem understanding a medical situation is not recorded in the Facility interview.

Propensity to seek care: Propensity to seek care is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. The questions about propensity to seek care characterize indicators of a beneficiary's likeliness to seek and access health care services. Community respondents were asked whether they visit a doctor as soon as they feel bad, worry about their health more than others their age, will do just about anything to avoid going to the doctor, had ever had a problem and did not seek a doctor, keep it to themselves when sick, and had ever had a prescription they did not fill due to cost. Propensity to seek care is not recorded in the Facility interview.

Proxy: Beneficiaries who were too ill, or who could not complete the Community interview for other reasons, were asked to designate a proxy, someone very knowledgeable about the beneficiary's health and living habits. In most cases, the proxy was a close relative such as the spouse, a son or daughter. In a few cases, the proxy was a non-relative like a close friend or caregiver. In addition, a proxy was utilized if a beneficiary had been reported as deceased during the current round's reference period or if a beneficiary who was living in the community in the previous round had since entered into a long-term care facility. Proxy interviews are only used for the Community interview, as the Facility interview is conducted with a staff member located at the facility (see definition of "Facility interview").

Pulmonary disease: Pulmonary disease is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional had ever told them that they had emphysema, asthma, or chronic obstructive pulmonary disease (COPD). Beneficiaries living in a facility were coded as either having or not having asthma, COPD, or chronic lung disease based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The pulmonary disease measure counts the presence of at least one of these conditions. Beneficiaries who have more than one condition are only counted once for the purposes of calculating the proportion of beneficiaries with pulmonary disease.

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, or two or more races and not of Hispanic origin were coded as other race/ethnicity.

Residence status: Medicare beneficiaries who only completed Community interviews during the calendar year are categorized as living only in the community. Medicare beneficiaries for whom only Facility interviews were completed during the calendar year are categorized as living only in facilities. Beneficiaries who completed at least one Community interview and for whom at least one Facility interview was conducted during the year are classified as both community and facility. Note that residence status is used in two ways in the Chartbook. First, it is used analytically for one- and two-way contingency tables. Second, it is used to establish analytic universes, which are described in footnotes and titles.

Respondent: The person who answers questions for the MCBS; this person can be the beneficiary, 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).

Satisfaction with care: Satisfaction with care is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. The questions about satisfaction with care represent the beneficiary's general opinion of all medical care received in the year preceding the interview. Community respondents were asked how satisfied or dissatisfied they were with the health care they had received over the past year from doctors and hospitals. Satisfaction with care is not recorded in the Facility interview.

- General care refers to the rating of the overall quality of medical care received by the beneficiary.
- Night and weekend availability refers to the rating of the availability of medical care for the beneficiary at night and on weekends.
- Ease of access to doctor refers to the rating of the ease and convenience of getting to a doctor or other health professional from the beneficiary's residence.
- Can obtain care in same location refers to the rating of the beneficiary's ability to get all medical care needs taken care of at the same location.
- Information from doctor refers to the rating of the information given to the beneficiary about what was wrong with him or her.
- Doctor's concern for overall health refers to the rating of the doctor's concerns for the beneficiary's overall health rather than for an isolated symptom or disease.
- Cost refers to the rating of the out-of-pocket costs the beneficiary paid for medical care.
- Availability of specialist care refers to the rating of the availability of care for the beneficiary by specialists.

Self-reported limited English proficiency: Self-reported limited English proficiency is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. Community respondents were asked how well they spoke English. A beneficiary was categorized as having limited English proficiency if they spoke English well, not well, or not at all. Beneficiaries who spoke English very well were categorized as not having limited English proficiency. English proficiency is not recorded in the Facility interview.

Sex: A beneficiary's sex is self-reported by the respondent.

Shingles Vaccine: Receipt of shingles vaccine is collected only for beneficiaries who completed at least one Community interview during the year. Community respondents 60 years of age and over were asked if they had ever received the shingles vaccine. Receipt of shingles vaccination is not recorded in the Facility interview.

Skilled nursing facility (SNF): SNF stays are classified as short-term stays that do not qualify for classification as long-term facility care. SNF stays are included in the Cost Supplement File if the discharge date for the stay was in the data collection year. SNF stay data are available for both beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Usage and expenditures for SNF were reported during a Community interview or, for beneficiaries enrolled in Fee-for-Service Medicare, obtained from *administrative* data sources.

Skin cancer: Community respondents were asked whether a doctor or other health professional had ever told them that they had skin cancer. Beneficiaries living in a facility were coded as either having or not having skin cancer based on information on active diagnoses provided by Facility staff or as abstracted from medical records.

Smoking status: Smoking status is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether they had smoked at least 100 cigarettes or 50 cigars in their entire life, and whether they currently smoke. A Facility staff member was asked whether or not a beneficiary living in a facility had ever smoked cigarettes, cigars, or pipe tobacco, and whether the beneficiary currently smokes. Beneficiaries who currently smoked were categorized as a “current smoker.” Beneficiaries living in the community who smoked 100 or more cigarettes or 50 or more cigars, and beneficiaries living in a facility who had ever smoked cigarettes, cigars, or pipe tobacco, but who were not current smokers, were categorized as “ever smoked.” Beneficiaries living in the community who did not meet the “current smoker” or “ever smoked” criteria who do not smoke or have not smoked, as reported for at least one of the cigar or cigarette use survey questions, were categorized as “never smoked.” Beneficiaries living in a facility who had never smoked were categorized as “never smoked.” Smoking includes the smoking of cigarettes or cigars for beneficiaries living in the community, and cigarettes, cigars, or pipe tobacco for beneficiaries living in a facility, but it does not include the use of other forms of tobacco, such as smokeless tobacco, or e-cigarettes.

Stroke: Stroke is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether a doctor or other health professional had ever told them that they had a stroke, brain hemorrhage, or cerebrovascular accident, including transient ischemic attack. Beneficiaries living in a facility were coded as having or not having a cerebrovascular accident, transient ischemic attack, or stroke based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The stroke measure counts the presence of at least one of these diagnoses. Beneficiaries who have more than one diagnosis are only counted once for the purposes of calculating the proportion of beneficiaries with history of stroke.

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 Fee-for-Service claim from administrative data, 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.

Total expenditures: Total expenditures in this Chartbook equal the sum of expenditures by Medicare, Medicaid, private insurance, out-of-pocket, and other sources, as defined below. These expenditures include only health care goods and services purchased directly by individuals during the data collection year. 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. Data regarding expenditures is collected in Community and Facility interviews as well as obtained from *administrative* data sources.

- Medicare expenditures equal Medicare program payments for Fee-for-Service beneficiaries and payments by Medicare Advantage plans to health care providers. For beneficiaries enrolled in Fee-for-Service, Medicare expenditures are based on claims and survey-reported data. For beneficiaries enrolled in Medicare Advantage, Medicare expenditures are based on survey-reported data.¹

¹ Note that in previous MCBS Health and Health Care of the Medicare Population (HHC) table packages, released for the 2013 MCBS and earlier data years, Medicare expenditures for MA beneficiaries were not based on spending and utilization reported by survey respondents. Instead, they were based on capitation payments by CMS to MA plans.

- Medicaid expenditures consist of payments for services made by state Medicaid programs. Medicaid covers coinsurance amounts, copayments, deductibles, and charges for some non-Medicare covered services not paid for by other public or private insurance plans.
- Private insurance expenditures consist of payments made by individually-purchased private insurance plans and employer-sponsored private insurance plans, plus payments reported by or imputed for beneficiaries enrolled in private health maintenance organizations. The definition applies to beneficiaries who only completed Community interviews during the year and beneficiaries who completed at least one Community interview and for whom at least one Facility interview was conducted during the year. For beneficiaries for whom a Facility interview was completed, private insurance expenditures consist of payments made by private health insurance plans, whose sources (i.e., individual purchase or employer-sponsored) are unknown. No distinction was made during the collection of the Facility data as to the source of private health insurance plans.
- Out-of-pocket expenditures consist of direct payments to providers made by the beneficiary, or by another person on behalf of the beneficiary. These payments are for coinsurance amounts, copayments, deductibles, balance billings, and charges for non-Medicare covered services not paid for by public or private insurance plans. These expenditures do not include premiums or Part D deductibles. A coinsurance is the percentage of covered hospital or medical expense, after subtraction of any deductible, for which an insured person is responsible. For example, after the annual deductible has been met, Medicare will generally pay 80 percent of approved charges for services and supplies covered under Medicare Part B. The remaining 20 percent of the approved charge is the coinsurance amount, for which the beneficiary is liable. A copayment is a form of cost-sharing whereby the insured pays a specific amount at the point of service or use (e.g., \$10 per doctor visit). A deductible is an initial expense of a specific amount of approved charges for covered services within a given time period (e.g., \$100 per year) payable by an insured person before the insurer assumes liability for any additional costs of covered services. For example, in 2017, Medicare Part A helped to cover hospital, skilled-nursing facility, home health-care, and other services after the beneficiaries paid initial expenses – known as the deductible – of up to \$1,260.
- Other source expenditures consist of payments made by other public health plans and private liability insurance plans. For beneficiaries who completed a Community interview, examples of other public sources of payment include state pharmaceutical assistance programs and payments for beneficiaries who received medical services from the Department of Veterans Affairs. For beneficiaries for whom a Facility interview was conducted, examples of other public sources of payment include payments from state, county, or community departments of mental health, state supplemental assistance and welfare programs, and Black Lung funds.

Expenditures by service type for MA beneficiaries were calculated based on “MA capitation ratios” – estimates of proportion of capitation payments allocated to each service type by MA plans – provided by CMS. Since Medicare expenditures for MA beneficiaries relied on data sources outside of the LDS files, the estimates in the HHC table package do not match the estimates in the LDS files.

Upper extremity limitation: Community respondents were asked how much difficulty they have reaching or extending their arms above shoulder level, and writing or handling and grasping small objects. For Facility interviews, a Facility staff member answered questions about the beneficiary's ability to reach or extend their arms above shoulder level, and to write or handle and grasp small objects. If the beneficiary had a little, some, or a lot of difficulty with these tasks, or could not do them at all, the response was coded as "yes." The response reflects whether the beneficiary usually had trouble reaching over her or his head or writing, rather than temporary difficulty, such as from a short-term injury.

Urinary incontinence: Urinary incontinence is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked how often they lost urine control in the past year. Beneficiaries living in the community were coded as "yes" if they lost urine control at least once every 2-3 months. Beneficiaries living in a facility were coded as "yes" if their frequency of incontinence was reported by Facility staff as "occasional" or more. Beneficiaries on dialysis or those with a catheter or urostomy/bladder bag were excluded from the calculation of urinary incontinence.

User rate: A user rate is defined as the percentage of beneficiaries with the given characteristics who used at least one of the relevant services during the data collection year.

Usual source of care: Usual source of care is presented in the Chartbook for beneficiaries who completed only Community interviews during the year. Community respondents were asked if they had a particular doctor or other health professional, or a clinic that they usually go to when they are sick or for advice about their health. If the beneficiary did not have a particular health care provider or clinic where they usually went for care or advice about health, the response was coded as "none." If the beneficiary did have a usual source of care, they were questioned about the type of place. "Managed care center" is a Medicare Advantage managed care plan center. "Other clinic/health center" includes a neighborhood or family health center, a freestanding surgical center, a rural health clinic, a company clinic, any other kind of clinic, a walk-in urgent center, a home visit from a health care provider, and care in a Department of Veterans Affairs facility, a mental health center, or other place not included in the listed categories. Usual source of care is not recorded in the Facility interview.

Veteran: A beneficiary reported as ever having served in the armed forces of the United States.

Vision problem: Vision problem is determined differently for beneficiaries who completed a Community interview and those for whom a Facility interview was completed. Community respondents were asked whether they wear eyeglasses, have trouble seeing, or whether a doctor or other health professional had ever told them that they were legally blind or had cataracts, glaucoma, diabetic retinopathy, or macular degeneration. Beneficiaries living in a facility were coded as using or not using a visual appliance, or having or not having some level of visual impairment, blindness, cataracts, glaucoma, macular degeneration, or a history of surgery for cataracts based on information on active diagnoses provided by Facility staff or as abstracted from medical records. The vision problem measure counts the presence of at least one of these conditions. Beneficiaries who have more than one condition are only counted once for the purposes of calculating the proportion of beneficiaries with a vision problem.

APPENDIX B: TECHNICAL APPENDIX

Introduction

This Technical Appendix provides information about the production of the estimates and standard errors presented in the 2018 Chartbook. For details about the MCBS sample design, survey operations, and data files, please see the *2018 MCBS Methodology Report* and *2018 Data User's Guide* available on the CMS MCBS website. The *MCBS New User Tutorial*, *Questionnaire User Documentation*, and other resources are also available on the CMS MCBS website.²

Data Sources

The MCBS data are made available to users via two annual Limited Data Set (LDS) files.

1. **Survey File** – demographic information, health insurance coverage, health status and conditions, and responses regarding access to care and satisfaction with care.
2. **Cost Supplement File** – comprehensive accounting of health care use, expenditures, and sources of payment.

Each of the two LDS releases contain multiple files, called segments, which are easily linkable through a common beneficiary key ID.

The data sources and weights used to create the chart exhibits and detailed tables of estimates in each section in this Chartbook are shown below in Table B.1.

Table B.1. 2018 MCBS Data Sources and Weights by Chartbook Section

| Section | Section Name | LDS File | Weights |
|---------|---|--------------------------------------|---------------------------------------|
| 1 | Who is in the Medicare Population? | Survey File | Survey File ever-enrolled weights |
| 2 | How Healthy are Medicare Beneficiaries? | Survey File | Survey File ever-enrolled weights |
| 3 | What is the Medicare Population's Access to Care and How Satisfied are Beneficiaries with Their Care? | Survey File | Survey File ever-enrolled weights |
| 4 | What Health Care Services do Medicare Beneficiaries Receive? | Survey File and Cost Supplement File | Cost Supplement ever-enrolled weights |
| 5 | How Much Do Health Care Services for the Medicare Population cost? | Survey File and Cost Supplement File | Cost Supplement ever-enrolled weights |

The first step in preparing the data for the Chartbook analysis is to extract all of the relevant variables from the LDS files, including survey weights. The MCBS files contain data suitable for

² <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/index>

analysis, but the Chartbook estimates occasionally require performing additional data-related tasks to create the desired presentation. For example, the Chartbook combines categories for demographic variables such as education and race/ethnicity. In addition, some of the measures presented in the Chartbook draw on multiple variables, such as chronic condition measures that are coded based on whether at least one of many possible variable conditions is true. In both of these cases, new variables are generated, referred to as “analytic variables,” rather than overwrite the original LDS file variables. This allows flexibility to develop various chart presentations and allows for tracking all chart and table estimates back to the original source variables.

Once all the analytic variables are constructed, a new master dataset is created by including all the analytic variables for each beneficiary. In total, the analytic dataset contains 15,237 beneficiaries from the 2018 Survey File, 9,232 of which have additional information about utilization and spending from the 2018 Cost Supplement File. The Survey File ever-enrolled weights represent the population that was ever enrolled in Medicare for any period during 2018, and they were used in producing all Survey File charts and tables in this Chartbook. The Cost Supplement File ever-enrolled weights represent the same population as the Survey File ever-enrolled weights, but are available for a smaller subset of beneficiaries who have met a minimum threshold of utilization data collection in 2018. This threshold is described in the *2018 MCBS Methodology Report*. These weights were used in producing all Cost Supplement File charts and tables in this Chartbook.

The MCBS interviews a sample of Medicare beneficiaries. Therefore, estimated standard errors are reported for all estimates in the Chartbook. The standard error is a measure of the statistical precision of an estimate. The standard errors reported in the detailed tables in this Chartbook reflect the complex sample design of the MCBS. The MCBS is based on a stratified, three-stage, probability-proportional-to-size (PPS) sample design (with post-stratified weights). To take into account the complex sample design features of the MCBS, important adjustments to the variance estimates are required (not doing so in the case of the MCBS would tend to underestimate the standard errors and the resulting confidence intervals would tend to be too narrow). Most commercial software packages today (including R, STATA, SUDAAN, and complex survey procedures in SAS) include techniques to accommodate the complex design of the MCBS.

The MCBS includes variables that can be used to obtain weighted estimates and estimated standard errors using two approaches³:

1. **Taylor-series linearization method:** the variables SUDSTRAT (sampling strata) and SUDUNIT (primary sampling unit), along with the full-sample weight (CS1YRWGT), are included for variance estimation using this method.
2. **Balanced repeated replication (BRR) method (Fay’s method):** a series of replicate weights (CS1YR001,..., CS1YR100) are included for variance estimation using this method.

This Chartbook uses the BRR method to generate standard errors for estimates, implementing SAS survey procedures. To explain how this process works in practice, an example is presented here using the normal approximation method of computing a confidence interval. Table 1.1 of this Chartbook indicates that 18.4 percent of all Medicare beneficiaries are veterans. The standard

³ For more information, see Wolter, K. M. (2007). *Introduction to Variance Estimation*. New York, NY: Springer-Verlag.

error of this estimate (0.4 percent) can be used to assess its statistical precision by constructing a 95 percent confidence interval, which can be calculated by using the formula

$$P \pm 1.96se(P),$$

Where P is the estimated (weighted) sample percentage and $se(P)$ is an estimate of the standard error of P . Based on this formula, the approximate 95 percent confidence interval for the estimated proportion of Medicare beneficiaries who are veterans is 18.4 percent plus or minus $1.96 \times 0.4 = 0.8$ percent, for a 95 percent confidence interval of (17.6, 19.2). Theoretically, if the same survey was repeated on 100 samples of the same size, the true population proportion to fall within this confidence interval 95 times out of 100.

All estimates in the Chartbook exclude beneficiaries for whom LDS data are missing for a given measure. Imputations were not performed on the LDS file variables used in the production of the Chartbook, as the LDS variables have already undergone thorough editing, quality control checks, and imputation prior to release. For more detailed information regarding data editing and imputation procedures conducted for the 2018 LDS releases, please consult the *2018 MCBS Methodology Report* available on the CMS MCBS website.

There are occasions in which certain categories of variables are excluded from a chart by design, generally because the excluded category is of less interest to researchers. For example, the category “other race/ethnicity” is excluded from charts that present race/ethnicity, which allows the chart to focus on differences between white non-Hispanic, black non-Hispanic, and Hispanic beneficiaries. When estimates are presented in charts or tables for these measures, beneficiaries in the excluded categories are not shown in the chart but are still included in the denominator for the estimate, meaning that totals across the categories in the chart may not add up to 100 percent.

Suppression is used in order to protect the confidentiality of Medicare beneficiaries by avoiding the release of information that can be used to identify individual beneficiaries. Estimates with a denominator of less than 50 sample persons or with a numerator of zero sample persons are suppressed in the Chartbook. Some estimates are suppressed because they do not meet minimum criteria for reliability, which are explained below.

Statistical Reliability

The Chartbook only displays statistics that meet reliability criteria. This reliability is assessed using two different sets of criteria, depending on the type of estimate. For proportions, the Clopper-Pearson method was used to compute confidence intervals for each estimate. Estimates with a confidence interval whose absolute width is at least 0.30, with a confidence interval whose absolute width is no greater than 0.05, or with a relative confidence interval width of more than 130% of the estimate are suppressed in the Chartbook.⁴

For other estimates, relative standard errors (RSEs) are calculated as the standard error of the estimate divided by the estimate itself (percentage), and the result is then converted to a percentage value by multiplying the decimal value by 100. Estimates with a relative standard error

⁴ Parker JD, Talih M, Malec DJ, et al. National Center for Health Statistics Data Presentation Standards for Proportions. National Center for Health Statistics. Vital Health Stat 2(175). 2017. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf

of greater than 30 percent are suppressed in this Chartbook because they do not meet the standards of reliability or precision.

Additional Information

Additional technical questions concerning the MCBS Chartbook may be directed to:

MCBS@cms.hhs.gov

To obtain historical copies of the *1994-2013 Characteristics and Perceptions of the Medicare Population* data tables, *1995-2013 Health and Health Care of the Medicare Population* data tables, or the *2018BS Annual Chartbook and Slides*, please reference the Centers for Medicare and Medicaid Services (CMS) website at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Data-Tables>.

MCBS Limited Data Sets (LDS) are available to researchers with a data use agreement. Information on ordering MCBS files from CMS can be obtained through CMS' LDS website at [https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/Data-Disclosures-Data-Agreements/DUA - NewLDS](https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/Data-Disclosures-Data-Agreements/DUA-NewLDS).

The MCBS Public Use Files (PUFs) are available to the public as a free download and can be found through CMS' PUF website at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/MCBS-Public-Use-File/index>.

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APPENDIX C: MEASURE CONSTRUCTION APPENDIX

Introduction

This Measure Construction Appendix documents how each measure presented in the Chartbook exhibits and tables is constructed to allow data users to replicate the Chartbook measures for their own analyses. The information presented in this appendix applies only to measures used for the Chartbook and can be considered an example of the analytic use of data from the MCBS for research purposes.

This information is intended to be used in conjunction with the Chartbook Glossary and Technical Appendix as well as other MCBS documentation publically available on the CMS MCBS website⁵. Data users should consult the *MCBS Data User's Guide: Cost Supplement File* and the *MCBS Data User's Guide: Survey File* for information regarding merging Limited Data Set (LDS) segments, applying appropriate survey weighting, and variance estimation, among other analytic guidance. Data users will also need to consult the MCBS codebooks for each data segment to use each variable properly for the Chartbook measure construction. Data users new to the MCBS should review the *MCBS New User Tutorial* before beginning their analyses. Further detailed information regarding the MCBS can be found in the *MCBS FAQs*, the *Methodology Report*, and the *Questionnaire User Documentation*. These resources are available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/index>.

For each Chartbook measure, this appendix documents:

- Measure name
- Universe of beneficiaries
- Variables used in construction
- Measure construction logic
- Numerator
- Denominator
- LDS release
- Segment(s) used
- Chartbook exhibit/table number

The Chartbook Technical Appendix details the rationale for creating analytic variables. Occasionally, an analytic variable is used in the construction of multiple Chartbook measures. If a measure uses an analytic variable that has already been constructed for a different Chartbook measure, that analytic variable will appear in italics in the 'universe of beneficiaries', 'variables used in construction', 'measure construction logic', and 'denominator' fields. All variables in italics have corresponding entries of their own in the Measure Construction Appendix.

For measures for which the 'universe of beneficiaries' field is not all Medicare beneficiaries, data users will need the INT_TYPE variable, located in the DEMO segment, to subset the denominator by the *Residence Status* measure. The denominator of each of these measures will correspond to the definition of the universe found in the Chartbook Glossary:

- The universe of **Community** (INT_TYPE = 'C') are beneficiaries who only completed Community interviews during the year.
- The universe of **Community and Both** (INT_TYPE = 'C' or 'B') are beneficiaries who completed at least one Community interview during the year.

⁵ <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/index>

- The universe of **Facility** (INT_TYPE = 'F') are beneficiaries for whom only Facility interviews were completed during the year.

To account for differences between the Community and Facility questionnaires and data collection protocols, some Chartbook measures that have a universe of all Medicare beneficiaries must be constructed separately for the Community and Facility universes. For these estimates which have been constructed separately by place of residence at the time of interview, data users should combine the measures to obtain an estimate for all Medicare beneficiaries. Rarely a beneficiary has data from both the Community *and* Facility measure constructions. In these instances, the data obtained from Facility interviews is used for that beneficiary for Chartbook measure construction.

The 'measure construction logic' field contains universal pseudo-code (not specific to any programming language or statistical package) for the construction of each measure's numerator. Data users will also need to construct the appropriate denominator using the information provided in the Measure Construction Appendix and codebooks.

All estimates in the Chartbook exclude beneficiaries for whom LDS data are missing for a given measure. Missing variable data, which encompass "Don't Know", "Not Ascertained", and "Refused" responses, are excluded from both the numerator and denominator in the calculation of each measure. For some measures, additional variable values are excluded. In these cases, data users are instructed in the 'measure construction logic' field to designate specific values as missing.

Table C.1. Detailed Measure Constructions

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|----------------------------|----------------------------|--------------------------------|--|---|--|-------------|-----------------|--|
| Age | All Medicare beneficiaries | D_STRAT | If D_STRAT = 1, then "0-44". If D_STRAT = 2, then "45-64." If D_STRAT = 3, then "65-69." If D_STRAT = 4, then "70-74." If D_STRAT = 5, then "75-79." If D_STRAT = 6, then "80-84." If D_STRAT = 7, then "85+." | Beneficiaries of 0-44, 45-64, 65-69, 70-74, 75-79, 80-84, and 85+ years of age, respectively | All beneficiaries | Survey File | DEMO | 1.1, 1.2, 1.5.a, 1.5.b, 1.6, 1.8, 1.9, 2.2, 2.3, 2.5, 2.11, 2.12, 2.14, 2.15, 2.16, 2.17, 2.19, 2.20, 3.3, 3.7, 3.8, 3.9, 3.10, 3.13, 4.3, 4.8, 4.9, 5.5, 5.10, 5.11, 5.14 |
| Alcohol Use | Community and Both | ROSTSEX; ALCDAY | If ROSTSEX = 1 and ALCDAY ≤ 2, or if ROSTSEX = 2 and ALCDAY = 1, then "Moderate." If ROSTSEX = 1 and ALCDAY > 2, or if ROSTSEX = 2 and ALCDAY > 1, then "Heavy." If ALCDAY = 0, then "Nondrinker." | Beneficiaries living in the community who report heavy drinking, moderate drinking, and nondrinking, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | NICOALCO, DEMO | 2.9 |
| Alzheimer's Disease | Community and Both | OCALZMER | If OCALZMER = 1, then "Yes." | Beneficiaries living in the community who have Alzheimer's disease | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | ALZHMR | If ALZHMR ≥ 1, then "Yes." | Beneficiaries living in a facility who have Alzheimer's disease | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---------------------------------|---------------------------|------------------------------------|--|--|--|-------------|----------------------|----------------------------------|
| Arthritis | Community and Both | OCARTHRH; OCOSARTH; OCARTHOT | If OCARTHRH = 1, or if OCOSARTH = 1, or if OCARTHOT = 1, then "Yes." | Beneficiaries living in the community who have arthritis | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4, 2.5, 2.6, 2.7, 2.13 |
| | Facility | ARTHRIT; OSARTH; GOUT | If ARTHRIT = 1, or if OSARTH = 1, or if GOUT = 1, then "Yes." | Beneficiaries living in a facility who have arthritis | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4, 2.5, 2.6, 2.7, 2.13 |
| Blood Pressure Screening | Community and Both | BPTAKEN | If BPTAKEN ≤ 2, then "Yes." | Beneficiaries living in the community who received blood pressure screening | All beneficiaries who completed at least one Community interview during the year | Survey File | PREVCARE | 2.10, 2.11 |
| Cancer, Other than Skin | Community and Both | OCCANCER | If OCCANCER = 1, then "Yes." | Beneficiaries living in the community who have cancer other than skin cancer | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | CANCER | If CANCER ≥ 1, then "Yes." | Beneficiaries living in a facility who have cancer other than skin cancer | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Cognitive Impairment | Community and Both | DISDECSN; PHQTRCON | If DISDECSN = 1, or if PHQTRCON = 3 or 4, then "Yes." | Beneficiaries living in the community who have cognitive impairment | All beneficiaries who completed at least one Community interview during the year | Survey File | NAGIDIS; MENTHLTH | 2.4 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|---------------------------|---|---|---|---|-------------|-----------------|----------------------------------|
| | Facility | CSMEMST; CSMEMLT; CSCURSEA; CSLOCROM; CSNAMFAC; CSINNH; CSDECIS; HCUNCOND; HCUNDOTH; APHASIA; MENTSUM | If CSMEMST = 1, or if CSMEMLT = 1, or if CSCURSEA = 0, or if CSLOCROM = 0, or if CSNAMFAC = 0, or if CSINNH = 0, or if CSDECIS ≥ 2, or if HCUNCOND ≥ 2, or if HCUNDOTH ≥ 2, or if APHASIA = 1, or if 0 ≤ MENTSUM ≤ 12, then "Yes." | Beneficiaries living in a facility who have cognitive impairment | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Delayed Care Due to Cost | Community | HCDELAY | If HCDELAY = 1, then "Yes." | Beneficiaries living only in the community who have delayed care due to cost | All beneficiaries who only completed Community interviews during the year | Survey File | ACCESSCR | 3.11 |
| Dementia, Other than Alzheimer's Disease | Community and Both | OCDEMENT | If OCDEMENT = 1, then "Yes." | Beneficiaries living in the community who have dementia, other than Alzheimer's disease | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | DEMENT | If DEMENT ≥ 1, then "Yes." | Beneficiaries living in a facility who have dementia, other than Alzheimer's disease | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Depression | Community and Both | OCDEPRSS | If OCDEPRSS = 1, then "Yes." | Beneficiaries living in the community who have depression | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|----------------------------------|---------------------------|---|---|--|--|-------------|------------------|----------------------------------|
| | Facility | DEPRESS | If DEPRESS \geq 1, then "Yes." | Beneficiaries living in a facility who have depression | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Diabetes | Community and Both | OCBETES | If OCBETES = 1, then "Yes." | Beneficiaries living in the community who have diabetes | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4, 2.5, 2.6, 2.7, 2.13 |
| | Facility | DIABMRN | If DIABMRN \geq 1, then "Yes." | Beneficiaries living in a facility who have diabetes | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4, 2.5, 2.6, 2.7, 2.13 |
| Difficulty Obtaining Care | Community | HCTROUBL | If HCTROUBL = 1, then "Yes." | Beneficiaries living only in the community who have had difficulty obtaining care | All beneficiaries who only completed Community interviews during the year | Survey File | ACCESSCR | 3.11 |
| Disability Status | Community and Both | DISHEAR; DISSEE; DISDECSN; DISWALK; DISBATH; DISERRND | Count instances of DISHEAR, DISSEE, DISDECSN, DISWALK, DISBATH, or DISERRND = 1. If count = 0, then "No disability." If count = 1, then "One disability." If count \geq 2, then "Two or more disabilities." | Beneficiaries living in the community who have no, one, and two or more disabilities, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | VISHEAR; NAGIDIS | 2.1, 2.3 |
| | Facility | INT_TYPE | If INT_TYPE = 'F', then "LTC Facility." | All beneficiaries living in a facility | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | DEMO | 2.1, 2.3 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|--|--|---|---|--|-------------|-----------------|----------------------------------|
| Dual Eligible Status | All Medicare beneficiaries | H_OPMDCD | If H_OPMDCD = 2, then "Non-dual eligible." If H_OPMDCD = 1, then "Full-benefit dual eligible." If H_OPMDCD = 3 or 4, then "Partial-benefit dual eligible." | Non-dual eligible, full-benefit dual eligible, and partial-benefit dual eligible beneficiaries, respectively | All beneficiaries | Survey File | HISUMRY | 1.3, 1.5.b, 1.8 |
| Education | All Medicare beneficiaries | SPDEGRCV | If $1 \leq \text{SPDEGRCV} \leq 3$, then "Less than a high school diploma." If SPDEGRCV = 4, then "High school graduate." If $5 \leq \text{SPDEGRCV} \leq 7$, then "Some college/vocational school." If SPDEGRCV = 8 or 9, then "Bachelor's degree and beyond." | Beneficiaries who received less than a high school diploma, graduated high school, attended some college/vocational school, and obtained a bachelor's degree and beyond, respectively | All beneficiaries | Survey File | DEMO | 1.1, 1.8, 1.9 |
| Employer-Sponsored Insurance | Community and Both | PLANTYPE; S_INS | For any reported plan for each beneficiary, if PLANTYPE = 20 or 21, and ($1 \leq \text{S_INS} \leq 3$ or $\text{S_INS} = 5$ or 6), then "Yes." | Beneficiaries living in the community who have any employer-sponsored insurance | All beneficiaries who completed at least one Community interview during the year | Survey File | HITLINE | 1.4 |
| Employer-Sponsored Insurance with Comprehensive Coverage | Community and Both (with Any Employer-Sponsored Insurance) | <i>Any Employer-Sponsored Insurance</i> ⁶ ; S_INS | If <i>Any Employer-Sponsored Insurance</i> = 'Yes', and S_INS = 1, then "Yes." | Beneficiaries with employer-sponsored insurance with comprehensive coverage | Beneficiaries with <i>Any Employer-Sponsored Insurance</i> | Survey File | HITLINE | 1.4 |

⁶ Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction**, **Measure Construction Logic**, and **Denominator** fields.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|------------------------|---------------------------|------------------------------------|--|---|--|-------------|-----------------|---|
| Flu Shot | Community and Both | FLUSHOT | If FLUSHOT = 1, then "Yes." | Beneficiaries living in the community who received a flu shot | All beneficiaries who completed at least one Community interview during the year | Survey File | PREVCARE | 2.10, 2.11 |
| Health Status | Community and Both | GENHELTH | If GENHELTH = 1, "Excellent." If GENHELTH = 2, "Very good." If GENHELTH = 3, "Good." If GENHELTH = 4, "Fair." If GENHELTH = 5, "Poor." | Beneficiaries living in the community who have excellent, very good, good, fair, or poor health, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | GENHLTH | 1.2, 2.1, 2.2, 4.6, 4.8, 4.9, 5.8, 5.10, 5.11, 5.14 |
| | Facility | SPHEALTH | If SPHEALTH = 0, "Excellent." If SPHEALTH = 1, "Very good." If SPHEALTH = 2, "Good." If SPHEALTH = 3, "Fair." If SPHEALTH = 4, "Poor." | Beneficiaries living in a facility who have excellent, very good, good, fair, or poor health, respectively | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.1, 2.2, 4.8, 4.9, 5.10, 5.11, 5.14 |
| Hearing Trouble | Community and Both | HCHELP; HCTROUB | If HCHELP = 1 or 3, or if HCTROUB ≥ 2, then "Yes." | Beneficiaries living in the community who have hearing trouble | All beneficiaries who completed at least one Community interview during the year | Survey File | VISHEAR | 2.4 |
| | Facility | HCHEAID; HCHECOND | If HCHEAID = 1, or if HCHECOND ≥ 1, then "Yes." | Beneficiaries living in a facility who have hearing trouble | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Heart Disease | Community and Both | OCMYOCAR; OCCHD; OCCFAIL; OCHRTCND | If OCMYOCAR = 1, or if OCCHD = 1, or if OCCFAIL = 1, or if OCHRTCND = 1, then "Yes." | Beneficiaries living in the community who have heart disease | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4, 2.5, 2.6, 2.7, 2.13 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|-------------------------|---------------------------------|--|--|--|---|-------------|-----------------|----------------------------------|
| | Facility | MYOCARD; HARTFAIL; CORARTDS; AOSTEN; AFIBDYS | If MYOCARD ≥ 1 , or if HARTFAIL ≥ 1 , or if CORARTDS ≥ 1 , or if AOSTEN = 1, or if AFIBDYS ≥ 1 , then "Yes." | Beneficiaries living in a facility who have heart disease | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4, 2.5, 2.6, 2.7, 2.13 |
| High Cholesterol | Community and Both | OCCHOLES | If OCCHOLES = 1, then "Yes." | Beneficiaries living in the community who have high cholesterol | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | HYPRLIPI | If HYPRLIPI ≥ 1 , then "Yes." | Beneficiaries living in a facility who have high cholesterol | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Hypertension | Community and Both | OCHBP | If OCHBP = 1, then "Yes." | Beneficiaries living in the community who have hypertension | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4, 2.5, 2.6, 2.7, 2.13 |
| | Facility | HYPETENS | If HYPETENS ≥ 1 , then "Yes." | Beneficiaries living in a facility who have hypertension | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4, 2.5, 2.6, 2.7, 2.13 |
| Hysterectomy | Community and Both ⁷ | HYSTEREC | If HYSTEREC = 1, then "Yes." | Beneficiaries living in the community who have received a hysterectomy | All female beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.20 |

⁷ Only female Community respondents are asked about receipt of hysterectomy during the Community interview.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|---------------------------------|--------------------------------|--|--|---|-------------|-----------------|----------------------------------|
| Intellectual or Developmental Disability | Community and Both | OCMENTAL | If OCMENTAL = 1, then "Yes." | Beneficiaries living in the community who have an intellectual or developmental disability | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | DOWNS | If DOWNS ≥ 1, then "Yes." | Beneficiaries living in a facility who have an intellectual or developmental disability | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Language Other than English Spoken at Home | Community | OTHLANG | If OTHRLANG = 1, then "Yes." | Beneficiaries living in the Community who speak a language other than English at home | All beneficiaries who only completed Community interviews during the year | Survey File | DEMO | S.1.a. |
| Mammogram | Community and Both ⁸ | MAMMOGRM | If MAMMOGRM = 1, then "Yes." | Beneficiaries living in the community who received a mammogram | All female beneficiaries who completed at least one Community interview during the year | Survey File | PREVCARE | 2.19 |
| Mental Condition | Community and Both | OCPSYCHO; OCDEPRSS | If OCPSYCHO = 1, or if OCDEPRSS = 1, then "Yes." | Beneficiaries living in the community who have a mental condition | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |

⁸ Only female Community respondents are asked about receipt of mammography during the Community interview.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|-----------------------------------|----------------------------|---|---|---|---|-------------|-----------------|----------------------------------|
| | Facility | MANICDEP; SCHIZOPH; DEPRESS; PSYCOTIC; ANXIETY; PTSD; D_MENTAL; APSYCH; DELUS | If MANICDEP \geq 1, or if SCHIZOPH \geq 1, or if DEPRESS \geq 1, or if PSYCOTIC \geq 1, or if ANXIETY = 1, or if PTSD \geq 1, or if D_MENTAL = 1, or if APSYCH = 1, or if DELUS = 1, then "Yes." | Beneficiaries living in a facility who have a mental condition | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Metropolitan Area Resident | All Medicare beneficiaries | H_CBSA | If H_CBSA = "Metro", then "Metro area." If H_CBSA = "Micro", or if H_CBSA = "Non-CBSA", then "Non- metro area." | Beneficiaries living in a metro area and non- metro area, respectively | All beneficiaries | Survey File | DEMO | 1.1 |
| Mobility Limitations | Community and Both | DIFWALK; <i>Disability Status</i> ⁹ | If DIFWALK = 1, then "No limitation." If DIFWALK \geq 2 and <i>Disability Status</i> = "No disability", then "Yes, with no disability." If DIFWALK \geq 2 and <i>Disability Status</i> = "1 disability" or "2 or more disabilities", then "Yes, with any disability." | Beneficiaries living in the community who have no limitation, mobility limitation and with no disability, and mobility limitation with any disability, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | NAGIDIS | 2.14 |
| | Facility | IADWALK | If IADWALK = 0, then "No limitation." If IADWALK \geq 1, then "Yes, with any disability." | Beneficiaries living in a facility who have no limitation, and mobility limitation with any disability, respectively | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.14 |

⁹ Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction** and **Measure Construction Logic** fields.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|-------------------------------------|----------------------------|--|---|---|--|-------------|-----------------|----------------------------------|
| Mortality Rate | All Medicare beneficiaries | H_DOD | If H_DOD is <u>not missing</u> , then Death = "Yes." | Beneficiaries who have died | All Medicare beneficiaries | Survey File | DEMO | 2.16 |
| Number of Chronic Conditions | All Medicare beneficiaries | <i>Alzheimer's Disease; Dementia, Other than Alzheimer's Disease; Depression; Mental Condition; Heart Disease; Cancer (Other than Skin); Hypertension; Diabetes; Arthritis; Osteoporosis/Broken Hip; Stroke; Pulmonary Disease; High Cholesterol; Parkinson's Disease¹⁰</i> | For each chronic conditions measure = 'Yes', add 1 to a count of chronic conditions. For beneficiaries for whom <i>Alzheimer's Disease</i> = 'Yes' and <i>Dementia, Other than Alzheimer's Disease</i> = 'Yes', only add 1 to the count of chronic conditions for these two conditions. For beneficiaries for whom <i>Depression</i> = 'Yes' and <i>Mental Condition</i> = 'Yes', only add 1 to the count of chronic conditions for these two conditions. | Medicare beneficiaries, with 0, 1, 2-3, 4-5, and 6 or more chronic conditions, respectively | All Medicare beneficiaries | Survey File | | 2.17, 5.9 |
| Osteoporosis/ Broken Hip | Community and Both | OCOSTEOP; OCBRKHIP | If OCOSTEOP = 1, or if OCBRKHIP = 1, then "Yes." | Beneficiaries living in the community who have osteoporosis or a broken hip | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | OSTEOP; HIPFRACT | If OSTEOP ≥ 1, or if HIPFRACT ≥ 1, then "Yes." | Beneficiaries living in a facility who have osteoporosis or a broken hip | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |

¹⁰ Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction** and **Measure Construction Logic** fields.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|----------------------------|----------------------------|--|---|--|--|-------------|-----------------|----------------------------------|
| Parkinson's Disease | Community and Both | OCPARKIN | If OCPARKIN = 1, then "Yes." | Beneficiaries living in the community who have Parkinson's disease | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | PARKNSON | If PARKNSON ≥ 1, then "Yes." | Beneficiaries living in a facility who have Parkinson's disease | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Part D Coverage | All Medicare beneficiaries | SRCCOV01-SRCCOV12; COV01-COV12; PLANTYPE; <i>Type of Medicare Coverage</i> ¹¹ | Where XX represents a month 01-12, if SRCCOVXX = 2 or 3 and COVXX = 1 for any value of XX, and PLANTYPE = 4, and <i>Type of Medicare Coverage</i> = 'MA', then "MA with Part D." If SRCCOVXX = 2 or 3 and COVXX = 1 for any value of XX, and PLANTYPE = 4, and <i>Type of Medicare Coverage</i> = 'Traditional FFS Medicare', then "FFS with Part D." | Beneficiaries with FFS only, FFS with Part D, MA only, and MA with Part D coverage, respectively | All beneficiaries | Survey File | HITLINE | 1.3 |

¹¹ Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction** and **Measure Construction Logic** fields.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|---------------------------|--------------------------------|--|--|---|----------------------|-----------------|-----------------------------------|
| | | | If (SRCCOVXX does not = 2 or 3 or COVXX does not = 1 for all values of XX, or PLANTYPE does not = 4), and <i>Type of Medicare Coverage</i> = 'MA', then "MA only." If (SRCCOVXX does not = 2 or 3 or COVXX does not = 1 for all values of XX, or PLANTYPE does not = 4), and <i>Type of Medicare Coverage</i> = 'Traditional FFS Medicare', then "FFS only." | | | | | |
| Per Capita Expenditures- Dental Services | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'DU.' | Total dental services expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |
| Per Capita Expenditures- Inpatient Hospital Services | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'IP.' | Total inpatient hospital services expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |
| Per Capita Expenditures- Medicare Home Health Services | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'HH.' | Total Medicare home health services expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |
| Per Capita Expenditures- Medicare Hospice Services | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'HP.' | Total Medicare hospice services expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|--|--|--|---|---|----------------------|-----------------|-----------------------------------|
| Per Capita Expenditures- Outpatient Hospital Services | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'OP.' | Total outpatient hospital services expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |
| Per Capita Expenditures- Physician/ Supplier Services | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'MP.' | Total physician/ supplier services expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |
| Per Capita Expenditures- Prescription Drugs | Community | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'PM.' | Total prescription drugs expenditures | All beneficiaries who only completed Community interviews during the year | Cost Supplement File | SS | 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 |
| Per Capita Out-of-Pocket Medicare Premium Expenditures | All Medicare beneficiaries (who are not dual eligible) | <i>Dual Eligible Status</i> ¹² ; H_PRAPRM; H_PTBPRM; H_CPRM01- H_CPRM12; H_DPRM01- H_DPRM12 | For all beneficiaries for whom <i>Dual Eligible Status</i> = 'Not Dual Eligible,' total = H_PTAPRM + H_PTBPRM + sum (H_CPRM01 – H_CPRM12) + sum (H_DPRM01 – H_DPRM12). | Total out-of-pocket Medicare premium expenditures | All beneficiaries who are not dual eligible | Survey File | HISUMRY | 5.14 |

¹² Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction** and **Measure Construction Logic** fields.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|----------------------------|------------------------------------|---|--|---|----------------------|-----------------|----------------------------------|
| Persons Who Provide Assistance Communicating with Medical Provider | Community ¹³ | MEDPVSTF; MEDPVFAM; MEDPVENG | If MEDPVSTF = 1, then "Medical Office Staff." If MEDPVFAM = 1, then "Family Member." If MEDPVENG = 1, then "No Assistance." | Beneficiaries living only in the Community who receive assistance communicating with their medical provider by medical office staff, a family member, or receive no assistance, respectively | All beneficiaries who self-reported limited English proficiency and speak a language other than English at home who completed only Community interviews during the year | Survey File | USCARE | S.3. |
| Per User Expenditures-Long-Term Facility Care | All Medicare Beneficiaries | EVNTTYPE; AEVENTS; AAMTTOT | For all beneficiaries for whom EVNTTYPE = 'FA' and AEVENTS > 0, sum AAMTTOT for all events where EVNTTYPE = 'FA.' | Total expenditures for all long-term facility care | All beneficiaries who have used long-term facility care during the year | Cost Supplement File | SS | 5.11, 5.12, 5.13 |
| Per User Expenditures-Skilled Nursing Facilities | All Medicare Beneficiaries | EVNTTYPE; AEVENTS; AAMTTOT | For all beneficiaries for whom EVNTTYPE = 'IU' and AEVENTS > 0, sum AAMTTOT for all events where EVNTTYPE = 'IU.' | Total expenditures for all skilled nursing facilities | All beneficiaries who have used skilled nursing facilities during the year | Cost Supplement File | SS | 5.10, 5.12 5.13 |
| Perceived Knowledge of the Medicare Program | Community | KCARKNOW | If KCARKNOW ≤ 2, then "Most or all." If KCARKNOW = 3, then "Some." If KCARKNOW ≥ 4, then "Little or none." | Beneficiaries living only in the community with most or all, some, and little or no knowledge of the Medicare program, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | MCREPLNQ | 3.8 |

¹³ Only respondents who have limited English proficiency and speak a language other than English at home are asked about assistance communicating with their medical provider during the Community interview.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|----------------------------|----------------------------|--------------------------------|--|--|--|-------------|-----------------|----------------------------------|
| Physical Activity | Community and Both | D_VIGTIM; D_MODTIM | If D_VIGTIM ≥ 3, or if D_MODTIM ≥ 5, then "Highly Active." If D_VIGTIM = 2, or if D_MODTIM = 3 or 4, then "Active." If D_VIGTIM ≤ 1, or if D_MODTIM ≤ 2, then "Sedentary." | Beneficiaries living in the community who are highly active, active, and sedentary, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | NAGIDIS | 2.18 |
| Physician Wait Time | Community | D_MDAPPT | If D_MDAPPT = 0 then "No Wait." If 1 ≤ D_MDAPPT ≤ 6 then "1-6 Days." If 7 ≤ D_MDAPPT ≤ 12, then "7-12 Days." If 13 ≤ D_MDAPPT ≤ 18, then "13-18 Days." If D_MDAPPT ≥ 19, then "19 + Days." | Beneficiaries living only in the community who waited 1-6 days, 7-12 days, 13-18 days, 19+ days, or had no wait for an appointment, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | ACCSSMED | 3.9 |
| Pneumonia Shot | Community and Both | PNEUSHOT | If PNEUSHOT = 1, then "Yes." | Beneficiaries living in the community who received a pneumonia shot | All beneficiaries who completed at least one Community interview during the year | Survey File | PREVCARE | 2.10, 2.11 |
| Poverty Status | All Medicare beneficiaries | IPR_IND | If IPR_IND = 1, then "0-100% FPL." If IPR_IND = 2, then "101-120% FPL." If IPR_IND = 3, then "121-135% FPL." If IPR_IND = 4, then "136-200% FPL." If IPR_IND = 5, then "201% FPL and above." | Beneficiaries at 0-100%, 101-120%, 121-135%, 136-200%, and 201% and above of the Federal Poverty Line (FPL), respectively | All beneficiaries | Survey File | DEMO | 1.1, 1.9, 2.8, 2.9, 2.18 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|--|---------------------------|--------------------------------|--|---|--|-------------|-----------------|----------------------------------|
| Preferred Language for Medical Care | Community ¹⁴ | LANGPREF | If LANGPREF = 1, then "English." If LANGPREF = 2, then "Language Other than English Spoken at Home." If LANGPREF = 3, then "Both English and Language Spoken at Home." If LANGPREF = 91, then "Other." | Beneficiaries living only in the Community who prefer to receive medical care in English, the language other than English that they speak at home, both English and the language they speak at home, or other, respectively | All beneficiaries who speak a language other than English at home and who have a usual doctor or clinic where they receive medical care, who completed only Community interviews during the year | Survey File | USCARE | S.1.b. |
| Problem Understanding a Medical Situation Due to a Language Barrier | Community ¹⁵ | LANGPROB | If LANGPROB = 1, then "Yes." | Beneficiaries living only in the Community who have had a problem understanding a medical situation due to a language barrier | All beneficiaries who self-reported limited English proficiency and speak a language other than English at home who completed only Community interviews during the year | Survey File | USCARE | S.2. |

¹⁴ Only respondents who speak a language other than English at home, and who have a usual doctor or clinic at which they receive medical care are asked about their preferred language for medical care during the Community interview.

¹⁵ Only respondents who have limited English proficiency and speak a language other than English at home are asked about problems understanding a medical situation due to a language barrier during the Community interview.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|--|---------------------------|--------------------------------|------------------------------|---|---|-------------|-----------------|----------------------------------|
| Propensity to Seek Care-Avoid Going to the Doctor | Community | MCAVOID | If MCAVOID = 1, then "Yes." | Beneficiaries living only in the community who avoid going to the doctor | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.2, 3.3, 3.4, 3.5 |
| Propensity to Seek Care- Ever Had a Prescription You Did Not Fill Due to Cost | Community | NOFILLRX | If NOFILLRX ≤ 2, then "Yes." | Beneficiaries living only in the community who ever had a prescription that they did not fill due to cost | All beneficiaries who only completed Community interviews during the year | Survey File | RXMED | 3.2, 3.3, 3.4, 3.5 |
| Propensity to Seek Care-Had a Problem and Did Not Seek Doctor | Community | MCDRNSEE | If MCDRNSEE = 1, then "Yes." | Beneficiaries living only in the community who had a problem and did not seek a doctor | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.2, 3.3, 3.4, 3.5 |
| Propensity to Seek Care- Visit a Doctor as Soon as You Feel Bad | Community | MCDRSOON | If MCDRSOON = 1, then "Yes." | Beneficiaries living only in the community who usually go to the doctor as soon as they feel bad | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.2, 3.3, 3.4, 3.5 |
| Propensity to Seek Care- When Sick, Keep It to Yourself | Community | MCSICK | If MCSICK = 1, then "Yes." | Beneficiaries living only in the community who, when sick, try keeping sickness to themselves | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.2, 3.3, 3.4, 3.5 |
| Propensity to Seek Care-Worry About Your Health More than Others | Community | MCWORRY | If MCWORRY = 1, then "Yes." | Beneficiaries living only in the community who worry about their health more than others | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.2, 3.3, 3.4, 3.5 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|--|----------------------------|--------------------------------|---|---|--|-------------|-----------------|--|
| Pulmonary Disease | Community and Both | OCEMPHYS | If OCEMPHYS = 1, then "Yes." | Beneficiaries living in the community who have pulmonary disease | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | ASTHCOPD | If ASTHCOPD ≥ 1, then "Yes." | Beneficiaries living in a facility who have pulmonary disease | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Race/Ethnicity | All Medicare beneficiaries | HISPORIG; D_RACE2 | If HISPORIG = 1, then "Hispanic." Else if D_RACE2 = 4, then "White non-Hispanic." Else if D_RACE2 = 2, then "Black non-Hispanic." Else if D_RACE2 = 1, or if D_RACE2 = 3, or if 5 ≤ D_RACE2 ≤ 7, then "Other Race/Ethnicity." | Beneficiaries of Hispanic, White non-Hispanic, Black non-Hispanic, and other race/ethnicity, respectively | All beneficiaries | Survey File | DEMO | 1.1, 1.2, 1.8, 1.9, 2.2, 2.3, 2.6, 2.8, 2.9, 2.11, 2.12, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 3.5, 3.8, 3.9, 3.13, 4.5, 4.8, 4.9, 5.7, 5.10, 5.11 |
| Residence Status | All Medicare beneficiaries | INT_TYPE | If INT_TYPE = "C", then "Community." If INT_TYPE = "F", then "Facility." If INT_TYPE = "B", then "Both." | Beneficiaries living in the community, a facility, or both, respectively | All beneficiaries | Survey File | DEMO | 1.1, 1.6, 1.7, 2.13 |
| Satisfaction with the Availability of Information on the Medicare Program | Community | KNFOSATI | If KNFOSATI ≤ 2, then "Yes." If KNFOSATI = 5, assign as missing to exclude from denominator. | Beneficiaries living only in the community who are satisfied with the availability of information on the Medicare program | All beneficiaries who only completed Community interviews during the year | Survey File | MCREPLNQ | 3.13 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|---------------------------|--------------------------------|---|---|---|-------------|-----------------|----------------------------------|
| Satisfaction with Care- Availability of Specialist Care | Community | MCSPECAR | If MCSPECAR = 1, then "Very Satisfied." If MCSPECAR = 2, then "Satisfied." If MCSPECAR = 3 or 4, then "(Very) Dissatisfied." If MCSPECAR = 5, then "No Experience." | Beneficiaries living only in the community who are Very Satisfied, Satisfied, (Very) Dissatisfied, and report having No Experience with Availability of Specialist Care, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.7, 3.12 |
| Satisfaction with Care- Can Obtain Care in Same Location | Community | MCSAMLOC | If MCSAMLOC = 1, then "Very Satisfied." If MCSAMLOC = 2, then "Satisfied." If MCSAMLOC = 3 or 4, then "(Very) Dissatisfied." If MCSAMLOC = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with their ability to obtain care in the same location, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.7, 3.12 |
| Satisfaction with Care- Cost | Community | MCCOSTS | If MCCOSTS = 1, then "Very Satisfied." If MCCOSTS = 2, then "Satisfied." If MCCOSTS = 3 or 4, then "(Very) Dissatisfied." If MCCOSTS = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with cost, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.10, 3.12 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|--|---------------------------|--------------------------------|---|---|---|-------------|-----------------|----------------------------------|
| Satisfaction with Care- Doctor's Concern for Overall Health | Community | MCCONCRN | If MCCONCRN = 1, then "Very Satisfied." If MCCONCRN = 2, then "Satisfied." If MCCONCRN = 3 or 4, then "(Very) Dissatisfied." If MCCONCRN = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with the doctor's concern for overall health, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.10, 3.12 |
| Satisfaction with Care- Ease of Access to Doctor | Community | MCEASE | If MCEASE = 1, then "Very Satisfied." If MCEASE = 2, then "Satisfied." If MCEASE = 3 or 4, then "(Very) Dissatisfied." If MCEASE = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with ease of access to the doctor, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.7, 3.12 |
| Satisfaction with Care- General Care | Community | MCQUALTY | If MCQUALTY = 1, then "Very Satisfied." If MCQUALTY = 2, then "Satisfied." If MCQUALTY = 3 or 4, then "(Very) Dissatisfied." If MCQUALTY = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with general care, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.10, 3.12 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|---------------------------|--------------------------------|---|--|--|-------------|-----------------|----------------------------------|
| Satisfaction with Care- Information from Doctor | Community | MCINFO | If MCINFO = 1, then "Very Satisfied." If MCINFO = 2, then "Satisfied." If MCINFO = 3 or 4, then "(Very) Dissatisfied." If MCINFO = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with information from the doctor, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.10, 3.12 |
| Satisfaction with Care- Night and Weekend Availability | Community | MCAVAIL | If MCAVAIL = 1, then "Very Satisfied." If MCAVAIL = 2, then "Satisfied." If MCAVAIL = 3 or 4, then "(Very) Dissatisfied." If MCAVAIL = 5, then "No Experience." | Beneficiaries living only in the community who are very satisfied, satisfied, (very) dissatisfied, and report having no experience with night and weekend availability, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | SATWCARE | 3.6, 3.7, 3.12 |
| Self-Pay Insurance | Community and Both | PLANTYPE; S_INS | For any reported plan for each beneficiary, if PLANTYPE = 30 or 31, and $(1 \leq S_INS \leq 3 \text{ or } S_INS = 5 \text{ or } 6)$, then "Yes." | Beneficiaries living in the community who have any self-pay insurance | All beneficiaries who completed at least one Community interview during the year | Survey File | HITLINE | 1.4 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|--|---|--|--|---|-------------|-----------------|---|
| Self-Pay Insurance with Comprehensive Coverage | Community and Both (with Any Self-Pay Insurance) | <i>Any Self-Pay Insurance</i> ¹⁶ ; S_INS | If <i>Any Self-Pay Insurance</i> = 'Yes', and S_INS = 1, then "Yes." | Beneficiaries with self-pay insurance with comprehensive coverage | Beneficiaries with <i>Any Self-Pay Insurance</i> | Survey File | HITLINE | 1.4 |
| Self-Reported Limited English Proficiency | Community | ENGWELL | If $2 \leq \text{ENGWELL} \leq 4$, then "Yes." | Beneficiaries living in the Community who reported Limited English Proficiency | All beneficiaries who only completed Community interviews during the year | Survey File | DEMO | 1.2 |
| Sex | All Medicare beneficiaries | ROSTSEX | If ROSTSEX = 1, then "Male." If ROSTSEX = 2, then "Female." | Male and female beneficiaries, respectively | All beneficiaries | Survey File | DEMO | 1.1, 1.2, 1.7, 1.8, 1.9, 2.2, 2.3, 2.7, 2.8, 2.9, 2.14, 2.15, 2.16, 2.17, 2.18, 3.4, 3.8, 3.9, 3.13, 4.4, 4.8, 4.9, 5.6, 5.10, 5.11 |
| Shingles Vaccine | Community and Both ¹⁷ | SHINGVAC | If SHINGVAC = 1, then "Yes." | Beneficiaries living in the community who received a shingles vaccine | All beneficiaries 60 years of age and over who completed at least one Community interview during the year | Survey File | PREVCARE | 2.12 |

¹⁶ Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction**, **Measure Construction Logic**, and **Denominator** fields.

¹⁷ Only respondents 60 years of age or over are asked about receipt of the shingles vaccine during the Community interview.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|-----------------------|---------------------------|---|---|--|--|-------------|-----------------|----------------------------------|
| Skin Cancer | Community and Both | OCCSKIN | If OCCSKIN = 1, then "Yes." | Beneficiaries living in the community who have skin cancer | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | CNRSKIN | If CNRSKIN = 1, then "Yes." | Beneficiaries living in a facility who have skin cancer | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Smoking Status | Community and Both | CIGNOW; CIGARNOW; CIG100; CIGAR50; CIGARONE | If CIGNOW = 1 or 2, or if CIGARNOW = 1 or 2, then "Current Smoker." If not "Current Smoker" and CIG100 = 1, or CIGAR50 = 1, then "Ever Smoked." If not "Current Smoker" or "Ever Smoked" and CIG100 = 2 or CIGAR50 = 2 or CIGARONE = 1 or 2, then "Never Smoked." If not "Current Smoker" or "Ever Smoked" and CIGNOW = 3 or CIGARNOW = 3, then "Never Smoked." | Beneficiaries living in the community who are current smokers, who have ever smoked, and who have never smoked, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | NICOALCO | 2.8 |
| | Facility | D_SMOKE; NOWSMOKE | If D_SMOKE = 0, then "Non-Smoker." If D_SMOKE = 1 and NOWSMOKE does not = 1, then "Former Smoker." If NOWSMOKE = 1, then "Current Smoker." | Beneficiaries living in a facility who are current smokers, former smokers, and non-smokers, respectively | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.8 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---------------------------------------|----------------------------|---|---|---|--|----------------------|-----------------|----------------------------------|
| Source of Payment | All Medicare Beneficiaries | AAMTCARE; AAMTMADV; AAMTCAID; AAMTPRVE; AAMTPRVI; AAMTPRVU; AAMTHMOP; AAMTOOP; AAMTOTH; AAMTDISC; AAMTTOT | For all events, Medicare expenditures = sum (AAMTCARE, AAMTMADV); Medicaid expenditures = sum (AAMTCAID); private expenditures = sum (AAMTPRVE, AAMTPRVI, AAMTPRVU, AAMTHMOP); out-of-pocket expenditures = sum (AAMTOOP); other source expenditures = sum (AAMTOTH, AAMTDISC); total expenditures = sum AAMTTOT. | Medicare, Medicaid, private, out-of-pocket, and other source expenditures, respectively | Total expenditures | Cost Supplement File | SS | 5.1a |
| Stroke | Community and Both | OCSTROKE | If OCSTROKE = 1, then "Yes." | Beneficiaries living in the community who have a history of stroke | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | CVATIAST | If CVATIAST ≥ 1, then "Yes." | Beneficiaries living in a facility who have a history of stroke | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |
| Supplemental Private Insurance | Community and Both | PLANTYPE; S_INS | For any reported plan for each beneficiary, if $20 \leq \text{PLANTYPE} \leq 31$ and $(1 \leq \text{S_INS} \leq 3 \text{ or } \text{S_INS} = 5 \text{ or } 6)$, then "Yes." | Beneficiaries living in the community who have any supplemental private insurance | All beneficiaries who completed at least one Community interview during the year | Survey File | HITLINE | 1.3 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|--|----------------------------|--------------------------------|---|--|--|----------------------|-----------------|----------------------------------|
| | Facility | PLANTYPE | For any reported plan for each beneficiary, if PLANTYPE = 70, then "Yes." | Beneficiaries living in a facility who have any supplemental private insurance | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | HITLINE | 1.3 |
| Total Expenditures-Dental Services¹⁸ | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'DU.' | Total dental services expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Total Expenditures-Inpatient Hospital Services | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'IP.' | Total inpatient hospital services expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Total Expenditures-Long-Term Facility Care | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'FA.' | Total long-term facility care expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Total Expenditures-Medicare Hospice Services | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'HP.' | Total Medicare hospice services expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Total Expenditures-Outpatient Hospital Services | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'OP.' | Total outpatient hospital services expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Total Expenditures-Physician/Supplier Services | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'MP.' | Total physician/supplier services expenditures | 1 | Cost Supplement File | SS | 5.1b |

¹⁸ Dental services expenditures are only available for those who completed at least one Community interview in the year.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|--|----------------------------|--|---|---|--|----------------------|-----------------|---|
| Total Expenditures-Prescription Drugs | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'PM.' | Total prescription drugs expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Total Expenditures-Skilled Nursing Facilities | All Medicare Beneficiaries | AAMTTOT; EVNTTYPE | Sum AAMTTOT for all events where EVNTTYPE = 'IU.' | Total skilled nursing facilities expenditures | 1 | Cost Supplement File | SS | 5.1b |
| Type of Medicare Coverage | All Medicare beneficiaries | H_MAFF01-H_MAFF12 | Where XX represents a month 01-12, if H_MAFFXX = 'MA' for any value of XX, then "Medicare Advantage". If H_MAFFXX = 'FFS' for any value of XX, then "Traditional FFS Medicare." | Beneficiaries with Medicare Advantage and traditional FFS Medicare coverage, respectively | All beneficiaries | Survey File | HISUMRY | 1.3, 1.5, 2.11, 2.12, 2.17, 2.19, 2.20, 3.1, 3.11, 3.12, 5.14 |
| Upper Extremity Limitations | Community and Both | DIFREACH; DIFWRITE; <i>Disability Status</i> ¹⁹ | If DIFREACH = 1 and DIFWRITE = 1, then "No limitation." If DIFREACH ≥ 2 or DIFWRITE ≥ 2, and <i>Disability Status</i> = "No disability", then "Yes, with no disability." If DIFREACH ≥ 2 or DIFWRITE ≥ 2, and <i>Disability Status</i> = "1 disability" or "2 or more disabilities", then "Yes, with any disability." | Beneficiaries living in the community who have no limitation, upper extremity limitation with no disability, and upper extremity limitation with any disability, respectively | All beneficiaries who completed at least one Community interview during the year | Survey File | NAGIDIS | 2.15 |
| | Facility | IADREACH; IADGRASP | If IADREACH = 0 and IADGRASP = 0, then "No limitation." Else if IADREACH ≥ 1, or if IADGRASP ≥ 1, then "Yes, with any disability." | Beneficiaries living in a facility who have no limitation, and upper extremity limitation with any disability, respectively | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.15 |

¹⁹ Chartbook measures that are also used as intermediate variables in the construction of other Chartbook measures are included in italics in the **Variables Used in Construction** and **Measure Construction Logic** fields.

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|----------------------------|---|--|---|--|----------------------|-----------------|-----------------------------------|
| User Rates-Dental Services | All Medicare beneficiaries | EVNTTYPE; AEVENTS; DENTNUM | For all events associated with each beneficiary, if EVNTTYPE = 'DU' and AEVENTS > 0, or if DENTNUM ≥ 1, then "Yes." | Beneficiaries who have used dental services | All beneficiaries | Cost Supplement File | SS, FAE | 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 |
| User Rates-Inpatient Hospital Services | All Medicare beneficiaries | EVNTTYPE; AEVENTS | For all events associated with each beneficiary, if EVNTTYPE = 'IP' and AEVENTS > 0, then "Yes." | Beneficiaries who have used inpatient hospital services | All beneficiaries | Cost Supplement File | SS | 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 |
| User Rates-Long-Term Facility Care | All Medicare beneficiaries | EVNTTYPE; AEVENTS | For all events associated with each beneficiary, if EVNTTYPE = 'FA' and AEVENTS > 0, then "Yes." | Beneficiaries who have used long-term facility care | All beneficiaries | Cost Supplement File | SS | 4.1, 4.9 |
| User Rates-Medicare Home Health Services | Community and Both | EVNTTYPE; AEVENTS | For all events associated with each beneficiary, if EVNTTYPE = 'HH' and AEVENTS > 0, then "Yes." | Beneficiaries living in the community who have used Medicare home health services | All beneficiaries who completed at least one Community interview during the year | Cost Supplement File | SS | 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 |
| User Rates-Medicare Hospice Services | All Medicare beneficiaries | EVNTTYPE; AEVENTS | For all events associated with each beneficiary, if EVNTTYPE = 'HP' and AEVENTS > 0, then "Yes." | Beneficiaries who have used Medicare hospice services | All beneficiaries | Cost Supplement File | SS | 4.1, 4.2, 4.4, 4.5, 4.6, 4.7 |
| User Rates-Outpatient Hospital Services | All Medicare beneficiaries | EVNTTYPE; AEVENTS; OPNUM | For all events associated with each beneficiary, if EVNTTYPE = 'OP' and AEVENTS > 0, or if OPNUM ≥ 1, then "Yes." | Beneficiaries who have used outpatient hospital services | All beneficiaries | Cost Supplement File | SS, FAE | 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 |
| User Rates-Physician/Supplier Services | All Medicare beneficiaries | EVNTTYPE; AEVENTS; MDNUM; MHNUMVIS; OPHLFLG; OPTOMFLG; PODIAFLG | For all events associated with each beneficiary, if EVNTTYPE = 'MP' and AEVENTS > 0, or if MDNUM ≥ 1, or if MHNUMVIS ≥ 1, or if OPHLFLG = 1, or if OPTOMFLG = 1, or if PODIAFLG = 1, then "Yes." | Beneficiaries who have used physician/supplier services | All beneficiaries | Cost Supplement File | SS, FAE | 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|---|----------------------------|--------------------------------|---|---|--|----------------------|-----------------|-----------------------------------|
| User Rates- Prescription Drugs | All Medicare beneficiaries | EVNTTYPE; AEVENTS | For all events associated with each beneficiary, if EVNTTYPE = 'PM' and AEVENTS > 0, then "Yes." | Beneficiaries who have used prescription drugs | All beneficiaries | Cost Supplement File | SS | 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 |
| User Rates- Skilled Nursing Facilities | All Medicare beneficiaries | EVNTTYPE; AEVENTS | For all events associated with each beneficiary, if EVNTTYPE = 'IU' and AEVENTS > 0, then "Yes." | Beneficiaries who have used skilled nursing facilities | All beneficiaries | Cost Supplement File | SS | 4.1, 4.8 |
| Usual Source of Care | Community | PLACEPAR; PLACEKND | If PLACEPAR = 2, then "None." If PLACEKND = 1, then "Doctor's office." If PLACEKND = 2, then "Medical clinic." If PLACEKND = 3, then "Managed care center." If PLACEKND = 11 or 12, then "Hospital/OPD/ER." If $4 \leq \text{PLACEKND} \leq 10$ or $\text{PLACEKND} \geq 13$, then "Other clinic/health center." | Beneficiaries living only in the community who have no usual source of care, and those usually receiving care through a doctor's office, medical clinic, managed care center, hospital/OPD/ER, and other clinic/health center, respectively | All beneficiaries who only completed Community interviews during the year | Survey File | USCARE | 3.1 |
| Urinary Incontinence | Community and Both | LOSTURIN | If LOSTURIN ≤ 5 , then "Yes." If LOSTURIN = 8, assign as missing to exclude from denominator. | Beneficiaries living in the community who have urinary incontinence | All beneficiaries who completed at least one Community interview during the year | Survey File | CHRNCOND | 2.4 |
| | Facility | CTBLADDC | If CTBLADDC = 2 or 3, then "Yes." If CTBLADDC = 4, assign as missing to exclude from denominator. | Beneficiaries living in a facility who have urinary incontinence | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |

| Measure | Universe of Beneficiaries | Variables Used in Construction | Measure Construction Logic | Numerator | Denominator | LDS Release | Segment(s) Used | Chartbook Exhibit/ Table Numbers |
|-----------------------|----------------------------|---|---|---|--|-------------|-----------------|----------------------------------|
| Veteran Status | All Medicare beneficiaries | SPAFAEVER | If SPAFAEVER = 1, then "Yes." | Veteran beneficiaries | All beneficiaries | Survey File | DEMO | 1.1, 1.8, 1.9 |
| Vision Problem | Community and Both | ECHELP; ECTROUB; ECLEGBLI; ECATARAC; EGLAUCOM; ERETINOP; EMACULAR | If ECHHELP = 1 or 3, or if ECTROUB ≥ 2, or if ECLEGBLI = 1, or if ECATARAC = 1, or if EGLAUCOM = 1, or if ERETINOP = 1, or if EMACULAR = 1, then "Yes." | Beneficiaries living in the community who have a vision problem | All beneficiaries who completed at least one Community interview during the year | Survey File | VISHEAR | 2.4 |
| | Facility | VISAPPL; VISION; BLIND; CATGLAUC; CATAROP | If VISAPPL = 1, or if VISION ≥ 1, or if BLIND = 1, or if CATGLAUC = 1, or if CATAROP = 1, then "Yes." | Beneficiaries living in a facility who have a vision problem | All beneficiaries for whom only Facility interviews were completed during the year | Survey File | FACASMNT | 2.4 |