

2023 Medicare Current Beneficiary Survey (MCBS) Internet Access and Use Among Medicare Beneficiaries Living in the Community Early Public Use File (PUF) Technical Appendix

DATA AND METHODS

This Technical Appendix provides information about the production of the preliminary estimates and margins of error (MOEs) presented in the 2023 Medicare Current Beneficiary Survey (MCBS) Internet Access and Use Among Medicare Beneficiaries Living in the Community Early Public Use File (PUF).

These preliminary estimates are based on data from the MCBS, a nationally representative, longitudinal survey of Medicare beneficiaries sponsored by the Centers for Medicare & Medicaid Services (CMS) and directed by the Office of Enterprise Data and Analytics (OEDA). The MCBS is the most comprehensive and complete survey available on the Medicare population and is essential in capturing data not otherwise collected through operations and administration of the Medicare program.

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 the CMS LDS website at <https://www.cms.gov/data-research/files-for-order/data-disclosures-and-data-use-agreements-duas/limited-data-set-lds>. MCBS Microdata PUFs are also available to the public as free downloads and can be found through the CMS PUF website at <https://www.cms.gov/data-research/statistics-trends-and-reports/mcbs-public-use-file>. The Internet Access and Use Early PUF and other PUFs based on MCBS microdata are available here: <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey/data-tables>.

For details about the MCBS sample design, survey operations, and data files, please see the most recent *MCBS Methodology Report* and *Data User's Guides* available on the CMS MCBS website at <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey>. For definitions of common key terms used for the MCBS, please see the *Glossary* available at the same link.

The universe for this Early PUF includes Medicare beneficiaries who were ever enrolled in Medicare during 2023 and were still alive, entitled, and enrolled at the time of their Winter 2024 Community interview. All outcome measures are based on preliminary data collected via the Beneficiary Knowledge and Information Needs Questionnaire (KNQ) in Winter 2024. These preliminary estimates are produced prior to final data editing and final weighting to provide early access to the most recent information from the MCBS. The preliminary data collected in Winter 2024 will undergo final processing and be released with the forthcoming 2023 Survey File, given that the reference period is 2023.

Some measures are constructed from survey questions that involve questionnaire skip logic. For these items, unless otherwise noted, if the respondent provided a "No" response and subsequently skipped the follow-up question, the response was still included in the denominator, and the follow-up question that was skipped was treated as a "No" response for measure calculation. "Don't know" and "Refused" responses were treated as missing values and excluded from both the numerator and denominator in measure calculation.

The preliminary KNQ Survey File ever-enrolled weights were used to produce estimates that represent the population that was ever enrolled in Medicare in 2023 and still alive, entitled, and

2023 Medicare Current Beneficiary Survey (MCBS) Internet Access and Use Among Medicare Beneficiaries Living in the Community Early Public Use File (PUF) Technical Appendix

living in the community in Winter 2024. Balanced repeated replication survey weights were used to account for the complex sample design.

Estimate suppression is used 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 addition, some estimates are suppressed because they do not meet minimum criteria for reliability. For the proportions in these tables, 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 percent of the estimate are suppressed.¹ MOEs are presented for each estimate.

The MCBS is authorized by section 1875 (42 USC 139511) of the Social Security Act and is conducted by NORC at the University of Chicago for the U.S. Department of Health and Human Services. The OMB Number for this survey is 0938-0568.

Additional technical questions concerning these estimates may be directed to:
MCBS@cms.hhs.gov.

WHAT'S NEW

The 2023 MCBS Internet Access and Use Early PUF now features five additional breakouts by beneficiary educational attainment, how well a beneficiary reads English, how well a beneficiary speaks English, sexual orientation, and the combination of dual eligibility status and language spoken at home. The chronic conditions measure was also revised to include chronic kidney disease.

The 2022 MCBS Internet Access and Use Early PUF is available at <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey/data-tables/2022-mcbs-early-puf-internet-access-and-use-among-medicare-beneficiaries>. For a complete listing of measures and available products, please see the CMS MCBS website at <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey>.

GLOSSARY

This Glossary provides an explanation of key terms and defines the measures for which estimates are presented in this Early PUF. All measures are based on preliminary administrative and survey data.

Chronic conditions: Chronic conditions comprise a group of 15 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, Parkinson's disease, and chronic kidney disease. It is possible for a beneficiary to have "ever" been diagnosed with both

¹ Parker, Jennifer D., Makram Talih, Donald J., Malec, et al. "National Center for Health Statistics Data Presentation Standards for Proportions." National Center for Health Statistics. *Vital Health Stat* 2, no. 175 (2017). Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf.

2023 Medicare Current Beneficiary Survey (MCBS) Internet Access and Use Among Medicare Beneficiaries Living in the Community Early Public Use File (PUF) Technical Appendix

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 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.

Disability status: 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 who had no serious difficulties with these activities were included in the category "No disability." Beneficiaries who had a serious difficulty in one area were categorized as "One disability." Beneficiaries who had a serious difficulty in more than one area were categorized as "Two or more disabilities."

Dual eligibility status: Annual Medicare-Medicaid dual eligibility measure was based on the state Medicare Modernization Act (MMA) files. Medicare beneficiaries were considered "dually eligible" if they were enrolled in Medicaid for at least one month. Beneficiaries who were not enrolled in Medicaid for at least one month in the calendar year were categorized as "non-dually eligible." This information was obtained from administrative data sources.

Frequency of internet use to get information: Respondents who reported that they use the internet to get information (either themselves or through someone else, like a friend or relative) were asked how frequently they use the internet for information (daily, weekly, monthly, or a few times a year or less). Respondents who do not use the internet to get information were categorized as a "No" response for each frequency of internet use measure.

Income: Information on income is self-reported by the respondent at their first fall interview. Respondents were asked to report the total income the beneficiary and their spouse/partner (if applicable) received from all sources during the year, including Social Security, Railroad Retirement, Supplemental Security Income (SSI), the Veteran's Administration, pensions, retirement accounts, interest, banking accounts, businesses, real estate, and jobs, before any taxes or deductions. Respondents were asked to report either a one-month estimate ("Less than \$2,080/month" or "\$2,080 or more/month") or an annual estimate ("Less than \$25,000/year" or "\$25,000 or more/year"). One-month estimates were recategorized as annual estimates.

In the final Survey File LDS, income is imputed when income data are missing. However, because these estimates are considered preliminary, missing values, including "Don't know" and "Refused" responses, were left as missing and excluded from measure calculations.

Margin of error (MOE): MOE is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs are based on standard errors calculated using replicate weights.

2023 Medicare Current Beneficiary Survey (MCBS) Internet Access and Use Among Medicare Beneficiaries Living in the Community Early Public Use File (PUF) Technical Appendix

Metropolitan/micropolitan area resident: This classification is based on Core Based Statistical Area (CBSA) designations.² Beneficiaries who live in a micropolitan statistical area or outside the boundaries of a CBSA designation were categorized as “Non-metropolitan area residents.” This information was obtained from administrative data sources.

Sexual orientation: Respondents were asked to self-report their sexual orientation. This question was only asked of beneficiaries (i.e., not proxy respondents). Responses of “Lesbian or gay” and “Bisexual” were collapsed as “Lesbian, gay, or bisexual.”

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Centers for Medicare & Medicaid Services. (2024). 2023 Medicare Current Beneficiary Survey (MCBS) Internet Access and Use Among Medicare Beneficiaries Living in the Community Early Public Use File (PUF). Retrieved from <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey/data-tables>.

² <https://www.census.gov/programs-surveys/metro-micro/about/glossary.html>