# Supporting Statement BFor Revision of Currently Approved Collection: Medicare Current Beneficiary Survey (MCBS)

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## B. Statistical Methods

The revision to this OMB package includes the following modifications to the Community instrument sections:

* Add three new items to the Beneficiary Knowledge and Information Needs Questionnaire (KNQ)
* Two items about beneficiary use of the Medicare Savings Program (MSP).
* One item about the beneficiaries’ knowledge about their right to file a complaint or appeal under the Medicare program.
* Add one new item to the Chronic Pain Questionnaire (CPQ) about the use of cannabidiol (CBD) for pain management.
* Add eight new items to the Health Status and Functioning Questionnaire (HFQ)
* Five items about the prevalence of bowel incontinence.
* Three items about oral health.
* Add eight new health equity items to the Satisfaction with Care Questionnaire (SCQ) about perceived discrimination from health care providers due to certain personal attributes.
* Add six new health equity items to the Demographics and Income Questionnaire (DIQ) to expand the survey’s sociodemographic items
* Two items related to religious affiliation.
* Four items related to sexual orientation and gender identity.
* Remove the standalone COVID-19 Community Supplement.
* Retain seven items and 23 follow-up items (depending on skip logic) about COVID-19 testing, diagnosis and vaccination in the COVID-19 Questionnaire (CVQ) in the main MCBS Community questionnaire.
* Retain six telemedicine items in the Telemedicine Questionnaire (TLQ) in the main MCBS Community questionnaire.
* Remove the standalone COVID-19 supplement from the Facility instrument
* Retain nine primary items and 15 follow-up items about telemedicine services, facility measures to prevent and control the spread of COVID-19, and changes in mental health services due to the pandemic in the Facility-Level COVID-19 (FC) Questionnaire in the main Facility instrument.
* Retain three primary items and 13 follow-up items about COVID-19 testing, diagnosis, and vaccination in the Beneficiary-Level COVID-19 (CV) Questionnaire in the main Facility instrument.
* Include new respondent materials to increase understanding of the survey and improve participation.

### B1. Universe and Respondent Selection

The target universe is current Medicare beneficiaries entitled to hospital and/or supplementary medical insurance and living in the 50 states or the District of Columbia. Both institutionalized and non-institutionalized beneficiaries are represented. Table B.1 summarizes the number of beneficiaries in the target universe based on CMS administrative records through 2021. The seven age groups shown in the table correspond to the primary sampling strata from which the samples for the MCBS are drawn. The age groups are defined by the beneficiaries’ age as of December 31 of the given year for 2016 and later.

Table B.1: Universe Counts Broken Down by MCBS Age Groups (in thousands)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age Interval** | **2016** | **2017** | **2018**  | **2019** | **2020**  | **2021** |
| **Disabled <45** | 1,888.80 | 1,842.08 | 1,791.78 | 1,771.52 | 1,744.56 | 1,715.78 |
| **45 to 64** | 7,150.16 | 7,076.64 | 6,903.46 | 6,773.12 | 6,641.56 | 6,411.54 |
| **65 to 69** | 15,727.66 | 15,767.28 | 15,978.62 | 16,368.74 | 16,895.90 | 16,975.40 |
| **70-74** | 12,401.12 | 13,080.94 | 13,647.66 | 14,322.88 | 14,967.58 | 15,115.86 |
| **75-79** | 8,607.10 | 9,080.94 | 9,463.14 | 9,820.30 | 10,117.54 | 10,576.94 |
| **80-84** | 6,069.32 | 6,137.60 | 6,301.04 | 6,441.96 | 6,610.14 | 6,737.94 |
| **85+** | 6,976.84 | 7,021.14 | 7,001.80 | 7,052.58 | 7,099.28 | 6,902.06 |
| **Total (64 and under)** | 9,038.96 | 8,918.72 | 8,695.24 | 8,544.64 | 8,386.12 | 8,127.32 |
| **Total (65 and over)** | 49,782.04 | 51,087.90 | 52,392.26 | 54,006.46 | 55,690.44 | 56,308.20 |
| **Total (All)** | 58,821.00 | 60,006.62 | 61,087.50 | 62,551.10 | 64,076.56 | 64,435.52 |

***Source:*** *Universe counts are based on a 5-percent extract of the Medicare administrative records and are computed as 20 times the extract counts.*

***Notes:*** *Puerto Rico beneficiaries are excluded from counts beginning in 2017 by sample design.*

*Totals do not necessarily equal the sum of rounded components.*

The target sample size of the MCBS has been designed to yield 9,691 [[1]](#footnote-1) completed cases providing Cost Supplement data per year (approximately 800-900 disabled enrollees under the age of 65 in each of two age strata, and 1,400-1,700 enrollees in each of five age strata for enrollees 65 and over) from 2023 onwards.

To achieve the desired number of completed cases, the MCBS selects new sample beneficiaries each year (referred to as the Incoming Panel) to compensate for nonresponse, attrition, and retirement of sampled beneficiaries in the oldest panel (referred to as the exit panel) and to include the current-year enrollees, while continuing to interview the non-retired portion of the continuing sample. The Incoming Panel is always added in the Fall round (also referred to as the Baseline interview); the retiring or exit panel occurs in the Winter round (and is the 11th and final interview for all respondents).

Each year, an analysis of non-response and attrition is conducted to determine the optimal sample size for the Fall round Incoming Panel. Through 2009, approximately 6,500 beneficiaries were added to the sample in the Fall (September – December) round each year to replace the exiting panel and to offset sample losses due to non-response and attrition. Beginning in the Fall round of 2010 and continuing through the decade, the number of beneficiaries included in the Incoming Panel sample release was gradually increased to compensate for declining response rates. Beginning in 2020 when interviewing shifted from in-person to telephone due to the COVID-19 pandemic, the Incoming Panel sample size was approximately 15,500. This increase is a reflection of the continued decline in response rates and the additional difficulty of locating respondents via telephone[[2]](#footnote-2). The sample size results in over 36,000 interviews completed per year.

Proxy interviews are attempted for deceased sample persons. If data are collected through the date of death, then these cases are counted as completed interviews. Sampled beneficiaries remain in the survey when they are unavailable for an interview in a given round; that is, they are carried forward into the next round. For these individuals, the reference period for their next interview is longer as it covers the period since their last interview. This ensures that there will not be a gap in coverage of utilization and expenditure data. If a sampled beneficiary is not interviewed for two consecutive rounds, they are not scheduled for any further interviews and are removed from case management. Such cases are treated as nonresponding cases.

The methodology for drawing the samples is described later in this document. The number of cases to be selected each year for the Incoming Panel (designated sample sizes) are larger than the targeted number of completes to compensate for non-response, ineligibility, and attrition. In addition, in 2020, more sample was required to compensate for a switch from in-person interviewing to telephone interviewing and the expected lower response rates associated with that mode. To see an illustration of the extent of the compensation necessary in Fall 2020 Round 88 to achieve the desired number of cases providing annual data, see Table B.2.

Table B.2: Sample Size Needed to Compensate for Initial Non-Response and Ineligibility in the 2020 Fall Round

Table B.2: Sample Size Needed to Compensate for Initial Non-Response and Ineligibility

| **Age on December 31 of reference year** | **Desired average number of cases providing annual data** | **Number sampled at Fall 2020 Round 88** |
| --- | --- | --- |
| 18-44 | 343  |  1,251  |
| 45-64 | 332  |  1,736  |
| 65-69 | 687  |  3,130  |
| 70-74 | 600  |  2,297  |
| 75-79 | 603  |  2,428  |
| 80-84 | 620  |  2,547  |
| 85+ | 648  |  2,563  |
| Total | 3,833  | 15,952 |

**Cross-sectional sample sizes for other domains.** There are multiple domains of interest in the MCBS, (for example, respondents with end-stage renal disease, persons residing in nursing homes, managed care enrollees, beneficiaries of various race and ethnic backgrounds, Medicaid recipients, and beneficiaries aligned to a provider participating in accountable care organizations). The MCBS will continue to maintain a minimum target of 9,000 completed responses in the annual Cost Supplement file to ensure that analysis can be performed on MCBS data for many domains of interest.

**Sample sizes for longitudinal analyses**. Beginning in 2018, under the rotating panel design specified for the MCBS, respondents remain in the sample for up to eleven rounds of data collection over a four-year period; prior to 2018, respondents remained in the sample for up to twelve rounds of data collection. The historical response rates and attrition rates observed in the MCBS are used to determine the rotational sample size and configuration of each new Incoming Panel. The rotational sample design attempts to achieve consistency in subgroup sample sizes across all panels comprising a particular calendar year.

Table B.3 (in section B2 below) presents the round-by-round conditional and unconditional response rates as of Round 85 (Fall round of 2019) for the samples (referred to in the table as “panels”) selected in 2013 through 2019. For example, from the bottom part of the table, it can be seen that by the 10th round of data collection for the 2016 panel, 21.8 percent of the 2016 panel were still in a formal responding status (that is, either the sampled beneficiary was alive and still participating in the study or had died but a cooperative proxy was found for the collection of data on the last months of life) or had participated in the survey until death, leaving enough data to estimate the last months of life. For the 2017 and 2018 panels, the unconditional response rates as of Round 85 were 26.2 percent (through the 7th round of data collection) and 34.3 percent (through the 4th round of data collection), respectively. The 2019 panel (the new panel selected in Round 85) had an initial response rate of 55.1 percent in its first round of data collection.

Round 85 (Fall 2019) is the latest round for which MCBS data have been fully processed. There were 2,473 interviews successfully completed at Round 85 with still-living members of the 2016 panel. For brevity, we refer to these 2,473 interviews as “live completes.” For the 2017 and 2018 panels there were 2,874 and 3,719 live Round 85 completes, respectively. For the first round of data collection for the 2019 panel, there were 6,150 completes at Round 85.

The MCBS has used a variety of techniques to maintain respondents in the survey and reduce attrition. These will be continued and adapted to comply with the time frames for initiating and implementing the continuing sample.

### B2. Procedures for Collecting Information

This section describes the procedures used to select the samples for the national survey. It includes a general discussion of the statistical methodology for stratification and rotational panel selection, estimation procedures, and the degree of accuracy needed. This is followed by a presentation of how instrument sections are used to enhance the analytic potential of the MCBS data. Finally, there is a discussion of rules for allowing proxy response.

#### Statistical Methodology for Stratification and Sample Selection

This section opens with a description of the MCBS sample design. This is followed by a general discussion of the selection of the original and annual new incoming samples and the use of Medicare administrative enrollment data each year to reduce problems associated with duplication of samples across the years.

1. PSU and Census tract clustering. The MCBS employs a complex multistage probability sample design. At the first stage of selection, the sample consists of 104[[3]](#footnote-3) primary sampling units (PSUs) defined to be metropolitan areas and clusters of nonmetropolitan counties. At the second stage of selection, samples of Census tracts are selected within the sampled PSUs. At the third and final stage of selection, stratified samples of beneficiaries within the selected Census tracts are sampled at rates that depend on age group and ethnicity.

The strata used for selection of the PSUs covers the 50 states and the District of Columbia. Since PSUs were selected randomly with probabilities proportionate to size, there are some states without any sample PSUs within their boundaries. Within major strata defined by region and metropolitan status, PSUs were sorted by percent of beneficiaries enrolled in HMOs and/or percent of beneficiaries who are minorities based on data in CMS administrative files. Substrata of roughly equal size were created from the ordered list for sample selection.

In 2014, within the PSUs, a sample of 703 second-stage units (SSUs) consisting of Census tracts or clusters of adjacent tracts was selected. There were several steps in the SSU sampling process. First, an extract of the entire Medicare administrative enrollment data was obtained, and all beneficiaries’ addresses were geocoded to the tract level. A minimum measure of size was used to determine whether a Census tract was large enough (i.e., had enough Medicare beneficiaries) to stand on its own as an SSU or would need to be combined with one or more adjacent tracts. A frame of 24,212 SSUs was then constructed, and a sample of 703 SSUs was selected using systematic probability proportional to size. These SSUs have been used for sampling MCBS beneficiaries since 2014[[4]](#footnote-4) and were sized to be used for up to 20 years. An additional sample of 339 reserve SSUs was also selected to support an expansion of the sample or the study of special rare populations in future years. To date, these reserve SSUs have not yet been used for sampling for the MCBS.

Table B.3: Conditional and Unconditional Response Rates as of the 2019 Panel for Medicare Current Beneficiary Survey by Interview Round

**Conditional Response Rates (%) for Medicare Current Beneficiary Survey by Interview Round**

| **Round** | **2013 Panel****(n at R67=****7400)** | **2014 Panel****(n at R70=****11398)** | **2015 Panel****(n at R73=****8621)** | **2016 Panel****(n at R76=****12145)** | **2017 Panel****(n at R79=****11623)** | **2018 Panel****(n at R82=****11523)** | **2019 Panel****(n at R85=****11615)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Round 1 | 72.8 | 58.7 | 53.3 | 54.7 | 55.3 | 55.9 | 55.1 |
| Round 2 | 87.4 | \*\*\* | 83.2 | 81.4 | 79.9 | 80.9 |  |
| Round 3 | 92.1 | 82.1 | 82.7 | 83.9 | 83.1 | 82.2 |  |
| Round 4 | 78.5 | 84.1 | 80.0 | 84.2 | 85.1 | 84.7 |  |
| Round 5 | \*\*\* | 85.9 | 88.3 | 87.9 | 88.1 |  |  |
| Round 6 | 86.9 | 81.1 | 88.0 | 87.7 | 85.7 |  |  |
| Round 7 | 87.6 | 83.4 | 87.7 | 88.1 | 89.4 |  |  |
| Round 8 | 89.8 | 91.1 |  91.5  | 90.9 |  |  |  |
| Round 9 | 82.2 | 89.7 |  92.0  | 89.2 |  |  |  |
| Round 10 | 87.9 | 90.3 |  91.9  | 93.2 |  |  |  |
| Round 11 | 94.4 | 96.2 | 96.8 |  |  |  |  |
| Round 12 | 97.2 |  |  |  |  |  |  |

**Unconditional Response Rates (%) for Medicare Current Beneficiary Survey by Interview Round**

| **Round** | **2013 Panel****(n at R67=****7400)** | **2014 Panel****(n at R70=****11398)** | **2015 Panel****(n at R73=****8621)** | **2016 Panel****(n at R76=****12145)** | **2017 Panel****(n at R79=****11623)** | **2018 Panel****(n at R82=****11523)** | **2019 Panel****(n at R85=****11615)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Round 1 | 72.8 | 58.7 | 53.3 | 54.7 | 55.3 | 55.9 | 55.1 |
| Round 2 | 63.4 | \*\*\* | 44.2 | 44.3 | 43.7 | 44.8 |  |
| Round 3 | 57.9 | 48.1 | ‡31.7 | 38.1 | 37.7 | 37.6 |  |
| Round 4 | 44.8 | 40.1 | 32.9 | 33.3 | 33.7 | 34.3 |  |
| Round 5 | \*\*\* | 35.8 | 31.3 | ‡29.0 | ‡28.2 |  |  |
| Round 6 | 42.1 | ‡21.9 | 28.1 | 27.5 | 27.3 |  |  |
| Round 7 | 36.6 | 28.4 | 25.6 | 25.5 | 26.2 |  |  |
| Round 8 | 33.6 | 27.1 | ‡23.0 | ‡21.9 |  |  |  |
| Round 9 | ‡20.2 | 24.6 | 22.7 | 22.1 |  |  |  |
| Round 10 | 28.6 | 23.2 | 21.7 | 21.8 |  |  |  |
| Round 11 | 28.0 | 23.0 | 21.7 |  |  |  |  |
| Round 12 | 25.3 |  |  |  |  |  |  |

\* The 2014 panel response rate was impacted by several operational design changes recognized during the transition between contractors in 2014, including an extensive CAPI instrument development effort originally considered out-of-scope for transition purposes, the initial need to release a larger 2014 Incoming Panel sample to account for a smaller continuing sample fielded in the fall of 2014, the hiring and training of 100 new interviewers for MCBS data collection, and the decision to extend the Incoming Panel data collection through the release of additional replicates in December 2014, resulting in a shorter data collection period and consequently lower response rate for 2,500 sample members.

\*\*\* Not available because the 2015 Winter and Summer rounds (R71 and R72) were combined for data collection in this year only. Again, this was due to transition activities that started in 2014 and were completed in 2015.

‡ In rounds where some cases are intentionally not fielded, unconditional response rates will be lower than they would have been if all eligible cases were fielded. For example, some cases were intentionally not fielded in Summer 2016 (Round 75) and Winter 2018 (Round 80). In Summer 2016 (Round 75), some cases were intentionally not fielded and instead were included in an early case release for Fall 2016 (Round 76). The resulting unconditional response rates for the 2013-2015 panels in the 9th, 6th, and 3rd rounds, respectively, were lower than they would have been had the cases been fielded, but increased again in the subsequent rounds. In Winter 2018 (Round 80), a group of 306 cases was intentionally not fielded as part of a strategic NIR experiment, affecting the 2015 and 2016 panels in their 8th and 5th rounds, respectively. In Winter 2019 (Round 83), a group of 600 cases was intentionally not fielded as part of a strategic NIR experiment, affecting the 2016 and 2017 panels in their 8th and 5th rounds, respectively.

1. Selection of beneficiaries. In the Fall 2020 Round 88, an Incoming Panel sample of 15,952 beneficiaries was selected from the Medicare administrative enrollment data[[5]](#footnote-5). This sample was clustered within the selected PSUs and SSUs and was designed to achieve uniform sampling weights within each strata. Beginning in 2015, beneficiaries eligible *anytime* during the sampling year are also included in the Medicare administrative enrollment sampling frame (referred to as current-year enrollees). Their inclusion allows for the release of data files up to one year earlier than previously possible.[[6]](#footnote-6) Also beginning in 2015, Hispanic beneficiaries living outside of Puerto Rico were oversampled. Nursing home residents are drawn into the sample in exactly the same manner as other beneficiaries residing in the community.

#### Estimation Procedure

To date, sampling weights have been calculated for each Fall round (1, 4, 7…, and 85) in order to produce the Survey File limited data sets (previously referred to as the Access to Care files), and for each calendar year in order to produce the Cost Supplement limited data sets (previously referred to as the Cost and Use files). In both cases, cross-sectional and longitudinal weights have been calculated. Some questionnaire sections fielded in the Winter or Summer rounds have specific cross-sectional weights calculated for them as well. In all cases, weights reflect differential probabilities of selection and differential nonresponse, and are adjusted to account for overlapping coverage of the panels included in the data files. Replicate weights were also calculated so that users can calculate standard errors using replication methods. In addition to the replicate weights, stratum and unit codes exist on each weight file for users who prefer to use Taylor Series methods to estimate variances.

Besides standard weighting and replicate weighting, another part of the estimation program includes the full imputation of the data sets to compensate for item non-response. Imputation of charges for non-covered services and sources of payment for covered services in the Cost Supplement files have been developed. Beginning with the 2015 data, unit-level imputation was also instituted to compensate for missing initial-round utilization and cost data[[7]](#footnote-7) for current-year enrollees. The weighting and imputation of data continue each year.

#### Degree of accuracy needed for the purpose described in the justification

A broad range of statistics are produced from the MCBS. There is no single attribute of beneficiaries and their medical expenses that stands out as the primary goal of the survey. Thus, there can be no simple criterion for the degree of reliability that statistics for each analytic domain should satisfy. Even with a larger sample size of 14,000 to 15,000 persons, there would be many small domains of interest for which it would be necessary to use modeling techniques or to wait several years for sufficient data to accumulate.

The MCBS will maintain a stratified approach to the selection of the sample. The sample will continue to be clustered by PSU and Census tract-based SSU and stratified by age domain and race/ethnicity; the tract-based SSU approach was an innovation first begun in 2014 which has resulted in greater efficiencies and increased analytic opportunities. We anticipate maintaining a total of 700-900 annual cases allocated to the two younger age categories for disabled beneficiaries who are not yet 65. The two age categories were selected because they indirectly reflect the means by which the disabled person becomes eligible for Medicare. Since the number of disabled sample persons per PSU and Census tract will be small, the effects of clustering on statistical precision should be mild for this subgroup. For example, depending on the prevalence of the characteristic being estimated, the MCBS has achieved standard errors for estimates of percentages ranging from 2-3% or lower for subgroup estimates based on 1,000 respondents.

Since many of the cost and reimbursement statistics derived from the MCBS may be heavily right-skewed (i.e., reflecting the higher end of the cost/reimbursement spectrum to a disproportionate degree), the accuracy may be lower in relative terms but still acceptable. For example, the relative standard error of the mean total Medicare reimbursements derived from the MCBS has generally ranged from 2.0-2.5% for the total sample, and 4.0-8.0% for subgroups.

Each of the age strata for the Medicare sample age 65 and over will be allocated 1,600-2,200 cases, with the oldest stratum (age 85 and over) being allocated about 1,900 cases with oversampling. A major reason for oversampling the very old is to obtain an adequate sample of nursing home stays. Variations in sampling weights across the age strata and clustering within PSU and Census tract will inflate sampling errors, but the resulting effective sample sizes should be adequate for most analyses.

#### Review of interview content for periodic data collection cycles to reduce burden.

1. Content and timing of instrument sections.

The primary variables of interest for the MCBS are the use and cost of health care services and associated sources and amounts of payment. While Medicare claims files supply information on billed amounts and Medicare payments for covered services, the survey provides important self-reported information on use of services not covered by Medicare and on payment sources and amounts for costs not reimbursed by Medicare. For both the Community and Facility components, the primary focus of the data collection is on use of services (dental, hearing and vision care, hospital, physician, medical providers, prescription medication and other medical services), sources and amounts of payment, and health insurance coverage. The MCBS interview collects continuous information on these items through thrice-yearly interviews; that is, once a new respondent completes their Baseline interview, they are asked utilization and cost questions each round.

Continuous data on utilization and expenditures are required for a number of reasons. First, several of the distinct expenditure categories involve relatively rare medical events (inpatient hospital stays, use of home health care, purchase of durable medical equipment, and so forth), so limiting the reference period would mean insufficient observations for annual estimates. Second, episodes of medical care often consist of a series of services over weeks or months; data collected several times a year allow examination of the grouping of services and costs around particular episodes of care. Third, payment for medical services often occurs considerably later than the utilization, so collection of complete information about a particular event can often only be obtained sometime after the event occurs.

The administration of the instruments will continue to follow the established pattern of data collection. Baseline interviews will be conducted in the initial interview with new Incoming Panel respondents. This will be followed with 10 interviews to collect utilization, cost and other important topics, referred to as Continuing interviews. Since the Baseline interview always occurs in the last four months of a calendar year, collection of utilization and expenditure data in the second interview means the reference period will always begin prior to January 1st. This creates use and expenditure estimates on a calendar year basis.

The literature (initially reported by Neter and Waksberg in 1964[[8]](#footnote-8) and confirmed in subsequent research by other analysts) indicates that collection of behavioral information in an unbounded recall period can result in large recall errors. The Incoming Panel interviews covered in this clearance request - Fall 2023 (Round 97), Fall 2024 (Round 100), and Fall 2025 (Round 103) -prepares the respondent for the collection of utilization and expenditure information in subsequent rounds, thus “bounding” the recall period for the next interview. During the Baseline interview, the respondent is provided with a calendar and interviewers emphasize the importance of this tool for use in future interviews. This calendar marks the recall period for the respondent and serves as the means to record utilization as well as a prompt to retain statements and bills.

1. Content of the instruments, Rounds 95-103.

Nearly all of the instrument sections as currently approved by OMB are unchanged. Table B.4 presents the core and topical sections that comprise the MCBS Community instrument. As shown in the table, the content and order of administration varies based on season of data collection (Fall, Winter, Summer) and the type of interview (Baseline, Continuing). Those sections with an asterisk (\*) include a revision contained in this clearance request (either adding or deleting questions). Occasionally an item may be moved from one questionnaire section to another to improve the flow and use of the data, or for other operational or analytic purposes.

Table B.4: Community Instrument Sections and Order of Administration

| **Section**Listed in the order in which the section is administered. | **Type of Section** (Core or Topical) | **Season of Administration**(Rounds Administered) | **Interview Type** (Baseline, Continuing, Both) |
| --- | --- | --- | --- |
| Introduction (INQ) | Core | All (Round 95-103) | Both |
| Enumeration (ENS) | Core | All (Round 95-103) | Both |
| Housing Characteristics (HAQ) | Topical | Fall (Rounds 97, 100, 103) | Both |
| Health Insurance (HIQ) | Core | All (Round 95-103) | Both |
| Mobility of Beneficiaries (MBQ) | Topical | Fall (Rounds 97, 100, 103) | Both |
| Preventive Care (PVQ) | Topical | All (Round 95-103) | Both |
| COVID-19 (CVQ)\* | Topical | All (Round 95-103) | Both |
| Health Status and Functioning (HFQ)\* | Core | Fall (Rounds 97, 100, 103) | Both |
| Nicotine and Alcohol Use (NAQ) | Topical | Fall (Rounds 97, 100, 103) | Both |
| Satisfaction with Care (SCQ)\* | Core | Fall (Rounds 97, 100, 103) | Both |
| Cognitive Measures (CMQ) | Core  | Fall (Rounds 97, 100, 103) | Both |
| Demographics and Income (DIQ)\* | Core | Fall (Rounds 97, 100, 103) | Both |
| Beneficiary Knowledge and Information Needs (KNQ)\* | Topical | Winter (Rounds 95, 98, 101) | Continuing |
| Usual Source of Care (USQ) | Core | Winter (Rounds 95, 98, 101) | Continuing |
| Telemedicine (TLQ)\* | Topical | Winter (Rounds 95, 98, 101) | Continuing |
| Chronic Pain (CPQ)\* | Topical | Summer (Rounds 96, 99, 102) | Continuing |
| Income and Assets (IAQ) | Core | Summer (Rounds 96, 99, 102) | Continuing |
| Drug Coverage (RXQ)  | Topical | Summer (Rounds 96, 99, 102) | Continuing  |
| Dental, Vision, and Hearing Care Utilization (DVH) | Core | All (Round 95-103) | Continuing |
| Emergency Room Utilization (ERQ) | Core | All (Round 95-103) | Continuing |
| Inpatient Utilization (IPQ) | Core | All (Round 95-103) | Continuing |
| Outpatient Utilization (OPQ) | Core | All (Round 95-103) | Continuing |
| Institutional Utilization (IUQ) | Core | All (Round 95-103) | Continuing |
| Home Health Utilization (HHQ) | Core | All (Round 95-103) | Continuing |
| Medical Provider Utilization (MPQ) | Core | All (Round 95-103) | Continuing |
| Access to Care (ACQ) | Core | Winter (Rounds 95, 98, 101) | Continuing |
| Prescribed Medicine Utilization (PMQ) | Core | All (Round 95-103) | Continuing |
| Other Medical Expenses (OMQ) | Core | All (Round 95-103) | Continuing |
| Statement Cost Series (STQ) | Core | All (Round 95-103) | Continuing |
| Post-Statement Cost (PSQ) | Core | All (Round 95-103) | Continuing |
| No Statement Cost Series (NSQ) | Core | All (Round 95-103) | Continuing |
| Cost Payment Summary (CPS) | Core | All (Round 95-103) | Continuing |
| Physical Measures (PXQ)^ | Core | Winter (Rounds 95, 98, 101) | Continuing, Exit Panel Only |
| Physical Measures (PXQ)^ | Core | Summer (Rounds 96, 99, 102) | Continuing, All Other Panels |
| End Section (END) | Core | All (Round 95-103) | Both |

^Only conducted for in-person interviews.

The Facility instrument collects information that is similar in content to the Community instrument. Table B.5 presents the core and topical sections that comprise the MCBS Facility instrument. As with the Community instrument, the content and order of administration varies based on season of data collection (Fall, Winter, Summer) and the type of interview (Baseline, Continuing). Those sections with an asterisk (\*) include a revision contained in this clearance request (either adding or deleting questions).

Table B.5: Facility Instrument Sections and Order of Administration

| **Section** | **Type of Section**(Core or Topical) | **Season of Administration** (Rounds Administered) | **Interview Type** (Baseline, Continuing, Both) |
| --- | --- | --- | --- |
| Facility Questionnaire (FQ) | Core | All (Round 95-103) | Both |
| Residence History (RH) | Core  | All (Round 95-103) | Both |
| Background Questionnaire (BQ) | Core  | Fall (Rounds 97, 100, 103) | Baseline |
| Health Insurance (IN) | Core | Fall (Rounds 97, 100, 103) | Both |
| Use of Health Services (US) | Core | All (Round 95-103) | Continuing |
| Expenditures (EX) | Core  | All (Round 95-103) | Continuing |
| Health Status (HS) | Core | Fall (Rounds 97, 100, 103) | Both |
| Facility-Level COVID-19 (FC)\* | Topical | Fall (Rounds 97, 100, 103) | Both |
| Beneficiary-Level COVID-19 (CV)\* | Topical | All (Round 95-103) | Both |
| Facility Questionnaire Missing Data^ | Core | All (Round 95-103) | Both |
| Residence History Missing Data^ | Core | All (Round 95-103) | Both |
| Background Questionnaire Missing Data^ | Core  | Fall (Rounds 97, 100, 103) | Baseline |

^Section only activated and available for administration when critical data points from the FQ, RH, or BQ sections are marked as missing, Don’t Know, or Refused.

The revision to this OMB package includes the following content changes to the Community and Facility instruments.

##### Summary of instrument changes beginning in Winter 2023 Round 95 through Fall 2025 Round 103:

* Add three new items to the Beneficiary Knowledge and Information Needs Questionnaire (KNQ)
* Two items about beneficiary use of the Medicare Savings Program (MSP).
* One item about the beneficiaries’ knowledge about their right to file a complaint or appeal under the Medicare program.
* Add one new item to the Chronic Pain Questionnaire (CPQ) about the use of cannabidiol (CBD) for pain management.
* Add eight new items to the Health Status and Functioning Questionnaire (HFQ)
* Five items about the prevalence of bowel incontinence.
* Three items about oral health.
* Add eight new health equity items to the Satisfaction with Care Questionnaire (SCQ) about perceived discrimination from health care providers due to certain personal attributes.
* Add six new health equity items to the Demographics and Income Questionnaire (DIQ) to expand the survey’s sociodemographic items
* Two items related to religious affiliation.
* Four items related to sexual orientation and gender identity.
* Remove the standalone COVID-19 Community Supplement.
* Retain seven items and 23 follow-up items (depending on skip logic) about COVID-19 testing, diagnosis and vaccination in the COVID-19 Questionnaire (CVQ) in the main MCBS Community questionnaire.
* Retain six telemedicine items in the Telemedicine Questionnaire (TLQ) in the main MCBS Community questionnaire.
* Remove the standalone COVID-19 supplement from the Facility instrument
* Retain nine primary items and 15 follow-up items about telemedicine services, facility measures to prevent and control the spread of COVID-19, and changes in mental health services due to the pandemic in the Facility-Level COVID-19 (FC) Questionnaire in the main Facility instrument.
* Retain three primary items and 13 follow-up items about COVID-19 testing, diagnosis, and vaccination in the Beneficiary-Level COVID-19 (CV) Questionnaire in the main Facility instrument.
* Include new respondent materials to increase understanding of the survey and improve participation.

##### Revise Beneficiary Knowledge and Information Needs Questionnaire (KNQ) to Add Two Items about Use of Medicare Savings Program

The Beneficiary Knowledge and Information Needs Questionnaire (KNQ) section is administered once per year during the Winter round. This revision adds two items to KNQ to measure beneficiary use of the Medicare Savings Program (MSP). The MSP program provides financial support to Medicare beneficiaries who do not qualify for Medicaid. There are four different MSP state-sponsored programs: (1) Qualified Medicare Beneficiary Program (QMB), (2) Specified Low-Income Medicare Beneficiary Program (SLMB), (3) Qualifying Individual Program (QI), and (4) Qualified Disabled and Working Individuals Program. Through these programs, beneficiaries may receive assistance paying for their Medicare premiums. In some cases, MSP may also pay Medicare Part A (Hospital Insurance) and Medicare Part B (Medical Insurance) deductibles, coinsurance, and copayments if the beneficiary meets certain conditions.

Enrollment in the Qualified Medicare Beneficiary program has been found to increase access to outpatient care. One study found that the program decreased cost-related forgone health care provider visits by nearly half[[9]](#footnote-9). However, the program remains underutilized. Among eligible beneficiaries, only 53% are enrolled in the QMB program, 32% are enrolled in the SLMB program, and 15% are enrolled in the QI program[[10]](#footnote-10). Barriers to MSP enrollment vary by beneficiary and by state but are generally attributed to lack of knowledge about the program, administrative complexity of enrolling, stigma, cultural and language barriers, and fears about the estate recovery process[[11]](#footnote-11).

Although the MCBS Drug Coverage Questionnaire (RXQ) currently asks about Part D Low Income Subsidy (LIS) assistance that beneficiaries may receive, CMS currently has no way of capturing information about beneficiaries who are eligible but not enrolled in the MSP program. To address this gap, CMS is adding two items to the KNQ beginning in Winter 2023 Round 95 to assess use of the MSP program; these items will be administered annually thereafter in the Winter round. The first item provides a definition of the MSP program and asks if the beneficiary receives assistance from the program. For those who say no, a second item asks if the beneficiary applied to their state Medicare office for help with medical expenses. These items are formatted in a way similar to the RXQ items that ask about assistance for Part D expenses. Administration of the two new items is straightforward; results of a small cognitive testing effort are found in Attachment 7. Adding these items to the MCBS will help to identify general barriers to enrollment as well as ascertain characteristics of beneficiaries who are eligible but not enrolled. Further, these items will help CMS develop information campaigns and outreach for beneficiaries who could get assistance with paying for their deductibles, coinsurance, and copayments.

##### Revise Beneficiary Knowledge and Information Needs Questionnaire (KNQ) to Add One Item about Knowledge of the Right to Appeal or File a Complaint

This revision adds one item about beneficiaries’ knowledge about their right to file a complaint or appeal under the Medicare program to KNQ. The Beneficiary and Family Centered Care Quality Improvement Organization Program (BFCC-QIO) is a national statutorily mandated program intended to help Medicare beneficiaries exercise their right to high quality health care. Required under Sections 1152-1154 of the Social Security Act, the QIO Program is an important resource in CMS’ effort to improve quality and efficiency of care for Medicare beneficiaries. BFCC-QIOs manage all beneficiary complaints and quality of care reviews to ensure consistency in the review process. They also handle cases in which beneficiaries want to appeal a health care provider’s decision to discharge them from the hospital or discontinue other types of services[[12]](#footnote-12). Beneficiary experiences, whether positive or negative, give the QIO Program the perspective to identify opportunities for improvement, develop solutions that address the real needs of patients, and inspire action by health professionals[[13]](#footnote-13). The BFCC-QIO uses information found through review of episodes of care with the input of patients, patient representatives, and providers to identify opportunities to improve the quality of care provided and address utilization issues. Most episodes of care QIOs review are identified via complaints or appeals from Medicare beneficiaries or their families. In its review, the QIO aims to ensure that this voice is heard to improve care, not just for the beneficiary, but for all patients in similar care situations. As they do this, QIOs review the quality of care in the context of practice guidelines, the current evidence base, and the community standard of practice[[14]](#footnote-14). Given the importance of beneficiary engagement in improving how health care is delivered, it is essential that the BFCC-QIO program understands Medicare beneficiaries’ awareness about their rights under the Medicare program. Complaints and appeals are vital to supporting the rights and services for Medicare beneficiaries, identifying opportunities for standardizing quality of care, and increasing patient safety.

The BFCC-QIO program routinely surveys beneficiaries who file complaints to ascertain customer satisfaction with their program. However, it is unknown what percentage of the population has not complained because they are unaware of their rights. To close this measurement gap, BFCC-QIO and CMS have collaborated on a new KNQ item that will be implemented starting in Winter 2023 Round 95. The new item will be administered annually in the Winter round; it will provide respondents with a brief explanation of their right to appeal or file a complaint under the Medicare program. The survey will then ask beneficiaries if they would know how to file a complaint or appeal with Medicare to address concerns about their quality of care. This item was tested with a small number of respondents and was refined based on the testing results (Attachment 7). Adding this item to the MCBS will help the BFCC-QIO program to understand how well it is meeting its mandate to ensure patient’s rights. It will also give CMS and BFCC NCORC a baseline understanding of beneficiary awareness that can then be tracked over time to measure whether they are successfully raising awareness.

##### Revise Chronic Pain Questionnaire (CPQ) to Add One Item about Use of Cannabidiol (CBD) for Pain Management

The Chronic Pain Questionnaire (CPQ) is administered once per year in the Summer round. This revision adds one item to the CPQ about the use of cannabidiol (CBD) for pain management. The existing Chronic Pain Questionnaire (CPQ) was designed by the National Pain Strategy (NPS), an Interagency Working Group created by the Department of Health and Human Services’ Interagency Pain Research Coordinating Committee (IPRCC) to enhance pain research efforts, promote collaboration across the government, and improve pain-related treatment strategies[[15]](#footnote-15). According to data collected by the 2018 MCBS CPQ, approximately 78% of Medicare beneficiaries experience chronic pain. Over half (57%) of these beneficiaries say their chronic pain limits their lives or work[[16]](#footnote-16). Multiple comorbidities and the risk of polypharmacy make it a challenge to determine the appropriate drug, dosage, and maintenance of therapy to manage pain. Opioids are the most commonly used agents for this purpose in the elderly. However, older adults face unique health challenges that can make them more susceptive to opioid use and misuse[[17]](#footnote-17). A recent study on elderly patients greater than 65 years of age using cannabinoids for various conditions showed a marked reduction in pain and a better safety profile compared to opioids[[18]](#footnote-18). However, the safety of long-term therapy has not been established[[19]](#footnote-19). As the use of CBD across the U.S. has increased for the management of pain, measures of pain treatment modalities should include CBD.

The existing CPQ section measures the prevalence of pain in the elderly and disabled Medicare population. For beneficiaries reporting chronic pain, the section also asks about current treatment modalities, including the use of alternative medical interventions such as massage and meditation. Starting in Summer 2023 Round 96, CMS will add the use of CBD to an existing series asking about other non-medication management methods for chronic pain to understand its use This item will be administered annually in the Summer round. This new item performed well and was easily understood during a small cognitive testing effort (see Attachment 7).

##### Revise Health Status and Functioning Questionnaire (HFQ) to Add Five Items about Prevalence of Bowel Incontinence

The Health Status and Functioning Questionnaire (HFQ) section is administered once per year in the Fall round. This revision adds 5 items to the HFQ to measure the prevalence and management of bowel incontinence. According to data from the 2007-2010 National Health and Nutrition Examination Survey (NHANES), over half of noninstitutionalized adults aged 65 and over reported some type of incontinence, including urinary leakage and/or accidental bowel leakage of mucus, liquid stool, or solid stool. About 8% of adults aged 65 and over had moderate, severe, or very severe bowel leakage[[20]](#footnote-20). In older adults, incontinence is associated with multiple interacting factors, including chronic conditions such as diabetes or stroke, inadequate fiber or water intake, neurologic and psychiatric conditions, cognitive impairment, and mobility impairment. Use of certain medications and polypharmacy may also contribute to bowel incontinence. Bowel incontinence has serious implications for quality of life, impacting one’s emotional, physical, and economic well-being. Further, it is associated with depression, anxiety, and self-isolation. Incontinence is also a predictor of functional limitations and is associated with an increase in falls, which may result in injuries or hospitalization[[21]](#footnote-21).

Although common among older adults, bowel incontinence is not sufficiently discussed in health care settings. A 2018 study showed that most primary care providers screen for urinary incontinence but not bowel incontinence, despite the fact that these two issues can be related[[22]](#footnote-22),[[23]](#footnote-23). Further, a 2015 study found that less than a third of adults aged 70 and over with bowel incontinence discussed this problem with their primary care physician. Those who had mild symptoms of bowel incontinence had little to no knowledge of the treatments available to them[[24]](#footnote-24).

Although the MCBS collects information on urinary incontinence, not enough is known about Medicare beneficiaries with bowel incontinence. To address this measurement gap, five items were sourced from a 2004 Mayo Clinic Study[[25]](#footnote-25) and adapted to model the urinary incontinence items in the HFQ to capture prevalence and type of stool leakage. Beneficiaries are first asked if they have experienced several types of bowel incontinence including leaking gas, leaking a small amount of stool, leaking a moderate amount of stool, and leaking a large amount of liquid stool. Beneficiaries who respond affirmatively to any type of bowel incontinence are next asked if they have talked with their health care provider about this issue. These items were refined based on the results of a small cognitive testing effort (see Attachment 7). Incorporating these items on the MCBS starting in Fall 2023 Round 97 will allow CMS to understand the prevalence of bowel incontinence among beneficiaries and develop better awareness and outreach regarding this medical issue; these items will be administered annually in the Fall round.

##### Revise Health Status and Functioning Questionnaire (HFQ) to Add Three Items about Oral Health

This revision adds three items about oral health to the HFQ. Older adults with the poorest oral health tend to be those who are economically disadvantaged, lack insurance, and are members of racial and ethnic minorities. Being disabled, homebound, or institutionalized also increases the risk of poor oral health[[26]](#footnote-26). Oral health problems in older adults include untreated tooth decay, gum disease, tooth loss, oral cancer, and chronic diseases stemming from untreated inflammation in the mouth, which can be exacerbated by dry mouth – a common side effect of many medications commonly taken by those aged 65 and older[[27]](#footnote-27).  There is also substantial evidence that periodontitis is a risk factor for certain systemic diseases, and impaired oral health, including missing teeth and dry mouth, has been associated with mastication and nutritional problems, especially among the elderly, with highly negative effects on their quality of life[[28]](#footnote-28).

Although the MCBS currently captures some oral health data, measures for dry mouth symptoms, tooth sensitivity, and overall oral health are needed to understand the impact of poor oral health on the overall health of Medicare beneficiaries. To address this gap, one item sourced from the 2019-2020 NHANES will be added to the MCBS to ask about health of the beneficiary’s teeth and gums[[29]](#footnote-29). In addition, two items adapted from the National Health Interview Survey (NHIS) 2008 Oral Health Supplement[[30]](#footnote-30) and the World Health Organization Oral Health Survey[[31]](#footnote-31) will be added to the HFQ to assess the prevalence of dry mouth and tooth sensitivity. These items will be implemented starting in Fall 2023 Round 97 and will be administered annually in the Fall round.

##### Revise Satisfaction with Care Questionnaire (SCQ) to Add Eight Health Equity Items about Perceived Discrimination from Health Care Providers

The Satisfaction with Care Questionnaire (SCQ) is administered once per year during the Fall round. This revision adds eight items to the SCQ to improve measures of health equity, including perceived discrimination from health care providers due to certain personal attributes. Executive Order 13985[[32]](#footnote-32), issued on January of 2021, called upon agencies to identify and work to redress inequities in their policies and programs that create barriers to equal opportunity to ensure that everyone can reach their highest potential. Differential treatment within the medical community is an important source of inequity that can lead to differences in health outcomes and quality of care. Accordingly, following the request from the Office of Minority Health, CMS proposes to add eight items to the Satisfaction with Care Questionnaire (SCQ) starting in Fall 2023 Round 97. These items will be administered annually in the Fall round and will ask the beneficiary to identify whether they have been treated in an unfair or insensitive way by their medical providers based on their race or ethnicity, language or accent, gender or gender identity, sexual orientation, age, culture or religion, disability, or medical history. This series of items was developed and will be undergoing testing for implementation on the Medicare Advantage (MA) and Prescription Drug Plan (PDP) Consumer Assessment of Healthcare Providers and Systems (CAHPS) Web Mode Field Test (pending OMB approval). This series performed well during a small cognitive testing effort conducted by CMS (see Attachment 7). Adding this series of items to the MCBS represents the best opportunity to align MCBS data collection with EO 13985. These data will allow CMS to capture the most actionable and impactful information about health care experiences that directly influence health outcomes and will provide CMS with additional measures for assessing health equity and fair treatment for underserved populations.

##### Revise Demographics and Income Questionnaire (DIQ) to Add Two Socio-Demographic Items about Religious Affiliation to Improve Measures of Health Equity

The Demographics and Income Questionnaire (DIQ) is administered annually in the Fall round. This section collects important socio-demographic information that is not available in administrative records and that can be used in analysis to identify issues of inequity for health care access and use. One of the few sociodemographic items not currently collected by the survey includes religious affiliation. To further support alignment with Executive Order 13985, two items from the 2020 General Social Survey will be added to the Demographics and Income Questionnaire (DIQ) starting in Fall 2023 Round 97 to ask for the beneficiary’s religious affiliation[[33]](#footnote-33). Adding two items to the DIQ about religious affiliation will expand the ability of analysts to assess differences in health care access and outcomes related to health equity. Further, these new items enhance information collected in the eight new health equity items proposed for addition to the SCQ. Collecting religious affiliation in DIQ will allow analysts to compare SCQ responses for beneficiaries who report perceived discrimination from health care providers because of their culture or religion.

##### Revise Demographics and Income Questionnaire (DIQ) to Add Four Socio-Demographic Items about Sexual Orientation and Gender Identity to Improve Measures of Health Equity

Another important gap in sociodemographic information on the MCBS survey includes a lack of items collecting sexual orientation and gender identity. Adding sexual orientation and gender identity items to the survey is part of CMS’ strategy to inform “Executive Order 13988 on Preventing and Combating Discrimination on the Basis of Gender Identity and Sexual Orientation”. Issued in January 2021[[34]](#footnote-34), this Executive Order called upon agencies to identify existing and new policies to promote equal treatment under the law and ensure that all persons are able to access healthcare and other essential services without being subjected to sex discrimination. To support alignment with Executive Order 13988, two items from the NHIS[[35]](#footnote-35) will be added to the MCBS to collect sexual orientation. The first item will ask the beneficiary if they think of themselves as gay/lesbian, straight, bisexual, or something else. If the beneficiary responds “something else”, they will be asked for a verbatim response. Verbatim responses will be reviewed and back-coded to monitor changes in preferred terminology over time and to assess the potential for future inclusion of new response options. These items were previously cognitively tested under MCBS Generic Clearance (OMB No. 0938-1275) and performed well (see summary report in Attachment 8). The items have been fielded on the NHIS since 2013, where they have been closely monitored for comprehension and sensitivity[[36]](#footnote-36). The proposed items also align with recommendations from the National Academies of Sciences, Engineering, and Medicine’s (NASEM’s) recent report, “Measuring Sex, Gender Identity, and Sexual Orientation”[[37]](#footnote-37).

Two items about gender identity will also be included from the U.S. Census Bureau’s Household Pulse Survey[[38]](#footnote-38). This series uses a two-step approach. Beneficiaries are first asked to report their sex assigned at birth on their original birth certificate (male or female). Next, respondents are asked to report their current gender identity (male, female, transgender, none of these). This same two-step series is supported by the NASEM report on measuring gender identity and is also being evaluated in the 2022 NHIS as part of an experiment that varies the order of items about sex assigned at birth and gender identity and varies between two options for wording the gender identity question[[39]](#footnote-39). This experiment will enable NCHS to understand whether question order or the wording of the gender identity question affects the level of consistency between these items and will inform long-term efforts to include gender identity questions on the NHIS. As the results of this experiment become available, CMS will collaborate with NCHS to align comparable MCBS items. Including sexual orientation and gender identity questions on the MCBS will provide nationally representative data on topics such as the accessibility and utilization of health care services by the Lesbian, Gay, Bisexual, and Transgender (LGBT) populations and the resulting health disparities that impact this community. These items will be added to the DIQ in Fall 2023 Round 97 where they will be administered annually in the Fall round.

##### Discontinue the Standalone MCBS COVID-19 Supplements

The previous clearance provided approval to administer COVID-19 items each round via a standalone Supplement or as part of the main MCBS questionnaires. The Supplement contained about 150 items and took about 15 minutes to administer each round. Starting in 2023, the MCBS COVID-19 Community Supplement will be discontinued resulting in a deletion of about 114 items. About 36 COVID-19 items that are expected to provide critical information in 2023 and beyond will be retained and integrated into the main MCBS Community questionnaire. The retained items will be administered via two streamlined sections:

* The COVID-19 Questionnaire (CVQ) will be administered each round and will ask whether beneficiaries have had a COVID-19 test, diagnosis, or vaccination since the last interview. While this section has about 30 total questions, only seven items will be asked of all respondents each round; based on skip logic, the remaining 23 retained items are only asked to a small number of respondents as a follow on to a previous question. For example:
* Beneficiaries who report having a COVID-19 test during the reference period will receive follow-up questions about the test results, out of pocket payment, and wait time for test results.
* Beneficiaries with a positive COVID-19 diagnosis during the reference period will also be asked whether they sought medical care for their COVID-19 illness and if not, the reason(s) why not.
* Beneficiaries who received a new COVID-19 vaccination dose since the last interview will be asked for details about the month and year of vaccination, vaccine manufacturer, and location of vaccination.
* Beneficiaries who did not receive a new COVID-19 vaccination dose since the last interview will be asked for their reason why not (e.g., not eligible for an additional dose at this time, fears about the vaccine, etc.).
* In addition, six items about the availability and use of telemedicine, previously administered as part of the standalone COVID-19 Supplement, will now be administered in a Telemedicine Questionnaire (TLQ) within the main Community questionnaire. These items will be administered once per year in the Winter round.

Similarly, starting in 2023, the MCBS COVID-19 Facility Supplement will be discontinued resulting in a deletion of about 50 items. Previously, this Supplement contained about 90 items and took about 15 minutes to administer each round. About 40 COVID-19 items that are expected to provide critical information in 2023 and beyond will be retained and fielded as part of the main MCBS Facility instrument. The retained items will be administered via two streamlined sections:

* The Beneficiary-Level COVID-19 (CV) Questionnaire will be administered each round and will ask whether beneficiaries have had a COVID-19 test, diagnosis, or vaccination since the last interview. Similar to the COVID-19 Questionnaire (CVQ) in the Community questionnaire, follow-up details will be asked for beneficiaries who have received a test, positive diagnosis, or new COVID-19 vaccination dose. Only 3 items in this section will be asked of all respondents; the remaining 13 items are only asked to a small number of respondents as a follow on to previous questions.
* The Facility-Level COVID-19 (FC) Questionnaire will be administered once per year in the Fall round and will ask about the availability of telemedicine services inside and outside of the facility, facility measures to prevent and control the spread of COVID-19, and changes in mental health services due to the pandemic. Approximately 9 items will be administered during most interviews; the remaining 15 items will be asked to a small number of respondents as a follow on to previous questions. This section will be administered in the Fall round only.

##### Rounds 95 through 103 Data Collection Procedures

1. Interviews with Incoming Panel sample persons in community. In the Fall rounds (Round 97, 100, 103), all newly selected beneficiaries will be mailed a Community Advance Letter from the Centers for Medicare and Medicaid Services (Attachment 1). Advance mail materials have been developed to accommodate interviews conducted in person and phone. Outreach with Incoming Panel beneficiaries is conducted primarily by telephone following a locating process to identify viable phone numbers for beneficiaries. Beneficiaries for whom a phone number cannot be located receive a version of the Community Advance Letter that requests they call the project toll-free number to schedule an interview.
	1. When conducting in-person interviews, field interviewers will carry copies of the advance materials (e.g., advance letter, frequently asked questions) for respondents who do not recall receiving them in the mail, as well as a copy of the MCBS Community Brochure and At the Door Sheet (Attachments 1 and 9). Additional reminder letter and postcard, thank you letters acknowledging participation, and tailored refusal conversion letters provide additional ways to build rapport and gain cooperation with beneficiaries and further improve response rates.
	2. The Community interviews (Rounds 95-103) will be administered to the respondent or a designated proxy using a CAPI program on a laptop computer. Attachment 2 includes a copy of all questionnaire sections administered in the Baseline interview, the continuing interview, and the Showcards used by the interviewer to assist in the interviewing process.

At the completion of the Baseline interview (Rounds 97, 100, 103), each new respondent is provided with a MCBS calendar (Attachment 1), on which he or she is encouraged to record health care events. The same calendar is provided to all Continuing Community respondents on a yearly basis. The calendar is provided either during an in-person interview or by mail following a phone interview.

* 1. Interviews with sample persons in institutions. All Facility interviews are administered to facility staff using a CAPI program on a laptop computer. For all facility residents, the Facility Eligibility Screener is administered each time a respondent is found to have entered a facility, or in the case of Baseline respondents, is currently in a facility (Attachment 3). The Facility instrument to be used in Rounds 95-103 is shown in Attachment 4.

An advance letter is sent to all facilities each time a respondent is found to have entered a facility, or in the case of Baseline respondents, is currently in a facility (Attachment 5). This advance letter has been tailored for interviews conducted in person as well as interviews conducted by phone. Additional letters for facility staff provide information on how to prepare for the interview, introduce the study to staff at third-party billing offices who may provide additional survey responses, and thank the facility staff for participation.

Some facility administrators will require consent of the sample person or a next of kin before releasing any information. The data collection contractor will offer to obtain such written consent, using the Resident Consent Form, and Next of Kin Consent Form. These forms as well as a HIPAA letter are included in Attachment 5.

#### Proxy rules.

For Community respondents, the preferred mode is self-response. Respondents are asked to designate proxy respondents. These are individuals who are knowledgeable about the respondent’s health care. In the MCBS, only those individuals who are designated by the respondents can serve as proxy respondents. In addition, a proxy is utilized if a beneficiary had been reported as deceased during the current round’s reference period or if a beneficiary who was residing 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.

Upon screening a facility where a sampled beneficiary is determined to be living, the interviewers determine the appropriate staff at the facility best able to respond. MCBS interviewers do not interview residents in a facility. Instead, interviewers are trained to determine and seek out the appropriate staff for the interview. If a respondent is incarcerated, we do not seek response. Other institutions will be treated on a case-by-case basis.

### B3. Methods for Maximizing Response Rates and Dealing with Issues of Non-Response

The sample for the MCBS is a heterogeneous population that presents a unique challenge for maximizing response rates. The survey selects respondents from two Medicare groups—those age 65 and over and those younger than 65 who have disabilities. Both of these groups have characteristics that often lead to refusals on surveys. Recent data on the MCBS indicate that the population aged under 65 tends to have a slightly higher response rate than the aged population. Increasing age, poor health or poor health of a family member are prevalent reasons for refusal. On the other hand, older persons are the least mobile segment of the population and thus, for a longitudinal survey, less likely to be lost due to failure to locate.

Because this is a longitudinal survey, it is essential that we maximize the response rates. To do so, data collection staff undertakes an extensive outreach effort each round. This includes the notification of government entities about the survey including CMS regional offices and hotline, carriers and fiscal intermediaries, and Social Security Offices, national organizations including AARP and various community groups (e.g., social service and health departments, home health agencies, state advocates for the elderly, and area agencies on aging). These efforts are undertaken to answer questions or concerns that respondents may have to increase the likelihood that respondents would participate in the MCBS and remain in the survey panel.

Further, with the integration of telephone outreach and interviewing, additional efforts have been introduced to maximize participation among new Incoming Panel members. Prefield locating activities (including electronic database searches using LexisNexis® Accurint® and TransUnion® TLOxp batch processing) are run on the Incoming Panel to verify or update addresses and to obtain telephone numbers when available. This locating process provides initial telephone numbers to more than 90 percent of Incoming Panel beneficiaries. Additional mailings include a reminder letter and postcard, along with locating and tracing efforts to increase the availability of phone numbers and maximize response.

Specifically, efforts to maximize response rates include: 1) informing authoritative sources to whom respondents are likely to turn if they question the legitimacy of the MCBS; 2) giving interviewers resources to which they can refer to reassure respondents of the legitimacy/importance of the survey; 3) generally making information about MCBS available through senior centers and other networks to which respondents are likely to belong or reach out (such as the 1-800-Medicare hotline); and 4) mailing reminder postcards and letters to respondents to encourage their participation in the survey.

To maximize outreach CMS proposes to add several new respondent materials, including letters and frequently asked questions. These new materials are designed to increase understanding of the survey and thus improve participation. These recommendations are based on feedback gathered from current field interviewers about the questions that beneficiaries most frequently ask about the survey as well as materials to address questions raised by Facility staff members. Furthermore, with the shift to incorporate more phone data collection since the onset of the COVID-19 pandemic, several new letters focus on encouraging participation with new panel members (i.e., Baseline panel). Attachment 9 contains a table that lists these new materials and their intended purpose.

CMS intensively monitors both unconditional and conditional response rates. The unconditional response rate is the percentage of sample that were released during the fall round of the selection year and responded to the survey in a given year. The unconditional response rates, also called cumulative response rates, use the original selected sample size as the baseline in their calculation. Conditional response rates are the percentage of sample that were *eligible* at the beginning of the Fall round of a particular year and responded during that year. Conditional response rates use the sample who are eligible to participate in the survey (a subset of the sample released in the Fall round of the selection year) as the baseline in their calculation. In other words, they are conditioned on eligibility. Both indicators are very important for understanding trends about response rates and where interventions should optimally be targeted. These trends are monitored over the full historical span of the survey, providing important insights in changes to response rates over time.

Response is also tracked throughout each round by a host of key indicators including panel, HHS region, age, race, ethnicity, residential status (community or facility), current year Medicare enrollees or not-current year enrollees. In addition, performance by field interviewers is also tracked to identify any staff who need additional training or support to improve their interview completion rates. CMS continually analyzes response rates, particularly for the subpopulations with the lowest propensity to respond and is fully committed to finding ways to stem declining response rates.

In addition to outreach, the following efforts remain in place to maintain a sense of validity and relevance among the survey participants.

1. An advance letter is sent to both sampled beneficiaries and facility administrators from CMS with the CMS Survey Director’s signature. This includes an informational brochure answering anticipated questions. A reminder postcard and reminder letter are also sent to encourage response (Attachment 1 and 5).
2. A handout with Privacy Act information and an appeal to participate is given to the respondent at the door by the interviewer (Attachment 1).
3. Interviewer training emphasizes techniques and approaches effective in communicating with the older and disabled population and ways to overcome difficulties respondents may have in participating.
4. Individualized non-response letters are sent to respondents who refuse to participate (example included in Attachment 1). These letters are used when deemed appropriate by the field management staff.
5. A Health Care Statement letter is sent to Continuing Community respondents to provide information on how to read and understand statements in preparation for the interview (Attachment 9).
6. A Facility Prepare for Interview Letter will provide more information to Facility Administrators and Staff about the types of questions that will be asked during the Facility interview. A Facility Advance Letter for Billing Offices will be sent to serve as a gaining cooperation tool specifically for staff in third-party Billing Offices (Attachment 9).
7. NORC field management staff are specialized to follow up with respondents who express concerns about participating due to privacy or confidentiality questions.
8. Proxy respondents are sought for respondents unable to participate for themselves in order to keep respondents in the survey over the life of the panel.
9. Non-respondents are re-contacted by a refusal conversion specialist.
10. A dedicated project email address (mcbs@norc.org) and toll-free number (1-844-777-2151) is available to answer respondent's questions. This information is contained on various materials provided to the respondent.
11. An MCBS website (mcbs.norc.org) contains information for respondents on the project and has recently been updated to include a short explanatory video. Respondents are also informed about the CMS MCBS Project Page – [www.cms.gov/mcbs](http://www.cms.gov/mcbs)
12. Respondents receive an annual MCBS newsletter, which includes information about the survey as well as seasonal topics such as winter safety tips for seniors. Attachment 1 contains an example of a recent newsletter.
13. Whenever possible, the respondent is paired with the same interviewer throughout the survey. This maintains rapport and establishes continuity of process in the interview.
14. Interviewers are trained to utilize personal touches such as thank you notes and birthday cards to maintain contact with respondents.
15. A Community Authority Letter (Attachment 1) is sent to community organizations in advance of the Fall rounds (Rounds 97, 100, 103) to inform community representatives, such as state-level departments of aging, insurance, and state senior Medicare patrol officers, about the MCBS.
16. A language insert will be included with the Community Advance Letter for the Incoming Panel sample to provide an explanation of the survey for respondents who do not speak English or Spanish (Attachment 1).

A non-response bias analysis for the MCBS was conducted for the first time in 2017 and released as part of the 2015 MCBS Methodology Report. An updated non-response bias analysis for the MCBS was conducted based on the 2018 Panel and was released in the final 2018 Methodology Report[[40]](#footnote-40). This analysis also included beneficiaries who participated in COVID-19 surveys. While non-response is carefully monitored every year, a complete non-response bias analysis is updated every three years to ascertain trends both annually and for subpopulations.

In the most recent non-response bias analysis, Fall 2018 respondents and non-respondents were compared on various measures, including frame characteristics, Medicare claims payments, and chronic conditions, in order to identify areas of potential bias. The effects of weighting on potential nonresponse bias were also investigated: unweighted and weighted proportions of respondents across select frame-level attributes were compared to corresponding benchmarks. Significant differences were found among the demographic, claims payment, and chronic conditions variables. While nonrespondents appeared more likely to be female and older, and slightly more likely to fall into Missing or Other/Unknown race categories, demographic differences were not large. Significant differences were also found across various claims payment measures but were minimal and not consistently in the same direction (i.e., sometimes respondents had higher claims payments in certain settings, and other times non-respondents did). The same was true for beneficiaries with chronic conditions: Incoming Panel respondents in the Fall round were more likely to have a few of the chronic conditions than nonrespondents, but in later rounds and for the continuing panels, nonrespondents were more likely to have some of the chronic conditions than were respondents. While many differences were found, most were not large in a practical sense. Furthermore, across most of these measures, weighted respondent distributions were closer to benchmarks than unweighted respondent distributions, suggesting that the potential bias identified via these analyses is expected to be minimized by the weighting procedures. In contrast to most surveys, the MCBS has a large amount of information to characterize non- respondents. This information, including Medicare claims data, can be used for imputation if necessary.

While the nonresponse bias analysis excluded Medicare Advantage (MA) enrollees from many analyses, it has been noted in recent years that MA beneficiaries are more likely to respond to the MCBS than those enrolled in original Medicare. Beginning in 2017, CMS introduced additional nonresponse adjustments and calibration of the MCBS weights to match enrollment benchmarks by Fee-for-Service (FFS)/MA status, to reduce or eliminate any potential bias the differential response rates by enrollment status may have introduced.

Over the rounds, the following patterns of nonresponse have been observed, which have or have not changed over time. In the most recent three rounds for which a full analysis of response rates have been completed, the round-level response rates for continuing panels remains high, ranging from 80.0% for the 2015 panel in Round 76 to 97.2% for the 2013 panel in Round 78. Despite these high rates, each year continuing panels are subjected to a nonresponse adjustment based on new response propensity models by panel. Incoming Panels at the first interview (e.g., the 2015 panel at Round 73) show a larger propensity for nonresponse due to having never been reached prior to the first interview. In Round 76 the response rate for the 2016 Incoming Panel was 54.7%. Once again, we rely on cells derived from response propensity models to account for differential effects of demographic and geographic characteristics on the resulting data. In 2016 the most closely related covariates to response propensity in the Incoming Panel were: the mean response rate over the previous 5 years in the same county; entitlement for Part B (2-level: yes, no); age category (7-level: under 45, 45 to 64, 65 to 69, 70 to 74, 75 to 79, 80 to 84, and 85 years or older); and tract-level median household income for households where the householder is at least 65 years of age (4-level: quartiles of median household income in the past 12 months, in 2015 inflation-adjusted dollars). By accounting for these characteristics in constructing the adjustment cells, we reduce the potential for nonresponse bias that could arise due to these differential factors.

Adaptive design methods have also been applied to measure the representativeness of the MCBS incoming sample. In 2017, CMS conducted a review of the Representativity Indicators (R- indicators) or metrics for the Fall 2017 Baseline interview to monitor the representativeness of the achieved sample. The R-indicators provided a quantitative assessment of which segments of the sample were over/under producing and causing the achieved sample to be imbalanced in terms of sample representativeness.

A sample R-indictor as well as two partial R-indicators (variable and category) are used to monitor representativeness of the panel. The variable R-indicator measures the representativeness of the sample associated with each variable (looking at the strength of each co-variate subpopulation such as race, ethnicity, age, sex, region) to predict response propensity. The category R-indicator then looks at the categories of each variable to measure representativeness of the responding sample.

Since their inception, R-indicators have not been observed outside these thresholds; consequently, no data collection interventions were needed to improve the representativeness of the achieved sample. Use of R-indicators, along with a continual review of annual and historical response rates and non-response bias analysis are important tools in understanding response and ensuring that the sample as a whole, as well as subpopulations, are represented to produce high quality data. Future analysis will also focus on the R-indicators found in in-person data collection as compared to telephone data collection for the Baseline sample.

### B4. Tests of Procedures or Methods

MCBS’ generic clearance for Questionnaire Testing and Methodological Research for the MCBS was first approved by OMB in May 2015 and most recently received approval for revision on June 24, 2021 (OMB No. 0938-1275, expiration 06/30/2024). The generic clearance encompasses development and testing of MCBS questionnaires, instrumentation, and methodological experiments. It contains approval for six types of potential research activities:

1) cognitive interviewing, 2) focus groups, 3) usability testing, 4) field testing (both within and outside the MCBS production environment), 5) respondent debriefing questionnaire, and 6) research about incentives. Any future changes to the MCBS instrumentation, data collection methods, or procedures that require testing will be submitted as individual collection requests under the generic clearance.

In August 2015, CMS began a series of cognitive interviews with respondents to test the comprehension and sensitivity of new questionnaire items related to sexual orientation and gender identity. Over a period of several months, 57 interviews were conducted, 20 in English and 37 in Spanish. The questions in general tested well although there were a few examples of confusion among the Spanish version of the sexual orientation question. Results of this research are included in Attachment 8, Subsequently, CMS collaborated with NCHS to test minor revisions of the Spanish version of the sexual orientation question as included on the National Health Interview Survey (NHIS). This most recent version of the NHIS sexual orientation question is proposed for inclusion beginning with the 2023 MCBS. Regarding gender identity, the most recent version from the Census Bureau’s Pulse Survey is proposed for inclusion beginning with the 2023 MCBS; this version is also being testing on the 2022 NHIS.

In October 2021, CMS conducted a small number of cognitive tests (six) with respondents to test the comprehension and sensitivity of new questionnaire items related to Medicare program knowledge (use of the MSP program, knowledge of the right to appeal or file a complaint), use of CBD for pain management, prevalence of bowel incontinence, and health equity items related to perceived discrimination by health care providers and expanded demographic section to add religious affiliation for improved analysis of health equity. All six tests were conducted on the English language version of the items. Minor updates were made to the Medicare program knowledge and bowel incontinence items based on this testing effort to improve comprehension and flow. The remaining items tested well and therefore did not require revision. In February 2022, two additional cognitive tests were conducted on the Spanish version of the items to assess comprehension and flow. All items performed well. None of the tested items were considered sensitive by English- or Spanish-speaking respondents. Results from this testing effort are included in Attachment 7.

### B5. Individuals Consulted on Statistical Aspects of Design

The person responsible for statistical aspects of design is:

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1. Note that the historical target of 11,500 responding beneficiaries across all panels was not achievable in 2020; the target was reduced to 9,691, which was the maximum number of completed interviews achievable within budget. [↑](#footnote-ref-1)
2. Note that telephone numbers for beneficiaries are not available in the CMS administrative data used for sampling. Telephone numbers were appended to sampled addresses using vendor matching software; these numbers only sometimes reached the intended respondent. Additional manual locating was conducted by the field team to improve locating rates. [↑](#footnote-ref-2)
3. Note that prior to 2017, 107 PSUs were used for sampling for the MCBS. These included three PSUs in Puerto Rico. Beginning in 2017, Puerto Rico was removed from the MCBS sampling frame. [↑](#footnote-ref-3)
4. Beginning in 2017, the 18 SSUs selected from the three Puerto Rico PSUs were removed from the sampling frame, leaving 685 SSUs for sampling for the MCBS. [↑](#footnote-ref-4)
5. Note that the sample released was larger than previous MCBS samples due to the pivot from in-person to telephone interviewing and the associated expected lower rates of locating and response. [↑](#footnote-ref-5)
6. For example, persons who became eligible for Medicare during 2015 could have incurred health care costs in 2015. By including such persons in the sampling process up to a year earlier than was done previously, they can be appropriately represented in the 2015 Cost Supplement File up to a year earlier. [↑](#footnote-ref-6)
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31. <https://www.who.int/publications/i/item/9789241548649> [↑](#footnote-ref-31)
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