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2018 MEDICARE
HEALTH OUTCOMES
SURVEY-MODIFIED

DATA USERS
GUIDE

MEDICARE HEALTH

OUTCOMES SURVEY

CENTERS
FOR MEDICARE
& MEDICAID
SERVICES

HEALTH
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Preface

Medicare Health Outcomes Survey

The Centers for Medicare & Medicaid Services (CMS) is committed to monitoring the quality of care provided by its programs. The overall focus of the Medicare Health Outcomes Survey (HOS) is to gather valid and reliable health status data to assess a Medicare Advantage Organization's (MAO) ability to maintain or improve the physical and mental health of its Medicare beneficiaries over time. Since 1998, baseline data are collected from a new cohort annually with one re-measurement two years later.

Medicare Health Outcomes Survey-Modified

The Medicare Health Outcomes Survey-Modified (HOS-M) was fielded for the first time in 2002 as the Program of All-Inclusive Care for the Elderly (PACE) Health Survey, and was renamed in 2005 as the HOS-M. It is a modified version of the Medicare HOS that is administered annually by CMS to frail elderly and predominantly dual-eligible beneficiaries (i.e., recipients of both Medicare and Medicaid) in PACE organizations for the purpose of adjusting plan payments based on the frailty of their members.

Similar to the HOS, the HOS-M design is based on a randomly selected sample of individuals from each participating PACE organization. Unlike the HOS, the HOS-M is a cross-sectional survey that measures the physical and mental health functioning of beneficiaries at a single point in time without a follow up.

This HOS-M 2018 **Data Users Guide (DUG)** is designed to assist users with the beneficiary level HOS-M data file. The DUG includes an overview of the file organization, an explanation of the derived fields, a table defining the attributes of all fields in the file, and a copy of the survey instrument annotated with the field names in the data file.

Statutory Authority

Section 722 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) mandates collecting, analyzing, and reporting health outcomes information. This legislation also specifies that data collected on quality, outcomes, and beneficiary satisfaction to facilitate consumer choice and program administration must use the same types of data that were collected prior to November 1, 2003. Collected since 1998, the Medicare HOS is the first patient-reported outcomes measure in Medicare managed care, and therefore remains a critical part of assessing MAO quality. In addition, CMS includes the HOS results as a component of the Medicare Plan Finder (https://www.medicare.gov/find-a-plan), a web-based tool that helps inform beneficiaries about Medicare enrollment choices. CMS incorporates new survey components in HOS, as appropriate, in order to provide outcome measures that MAOs can use in quality improvement initiatives.

Technical Assistance

The Medicare HOS Information and Technical Support Telephone Line (1-888-880-0077) and the Email Address (hos@hcqis.org) are available to provide assistance with questions regarding the data file. Additionally, the CMS HOS website provides general information about the program (https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HOS/index.html). A full description of the program is available at www.HOSonline.org and the Medicare HOS glossary consisting of definitions relevant to the HOS and HOS-M may be accessed from the "Glossary" link at the bottom of site webpages.

Methodology and Design

Sampling Methodology

A total of 121 PACE organizations participated in the HOS-M in 2018. Beneficiaries were defined as eligible for the HOS-M if they were enrolled in a participating PACE plan, resided in the community, did not have End Stage Renal Disease (ESRD), and were age 55 or older. In general, for eligible plans with Medicare populations of 1,200 or more members, a simple random cross-sectional sample of 1,200 members was selected for the survey (i.e., the survey is not a cohort study). For eligible plans with populations of less than 1,200 members, all eligible members were included in the HOS-M sample. Ineligible beneficiaries included the following members: were deceased, were not enrolled in the health plan, had an incorrect address and phone number, had a language barrier, or were removed from the sample during survey administration due to disenrollment or institutionalization.

The definition of a completed survey, and hence the response rate, depends on the context. The definition of a completed survey for the HOS-M report is based on the Veteran's RAND 12-Item Health Survey (VR-12) summary measures, while a completed survey for frailty assessment is based on the Activities of Daily Living (ADL) questions.

For the HOS-M report, a completed survey is defined as one for which a physical component summary (PCS) or mental component summary (MCS) score could be calculated from the VR-12. Participating PACE plans may access their reports from the Quality and Performance/HOS module under HOS-M Feedback Reports on the CMS Health Plan Management System (HPMS). The HOS-M report sample size and response rate information is also available from the HOS-Modified Overview section on the HOS website at www.HOSonline.org. Please refer to the Medicare HOS-M Survey Status Information Table.

For frailty assessment, a completed survey is defined as one in which all six ADL questions are answered. Responses and ADL distributions considered for payment purposes are reported separately for PACE plans on the HPMS. Participating PACE plans may access their frailty results from the HPMS Risk Adjustment module under Survey Results for Frailty Adjustment.

For a more detailed discussion on sampling, data collection, and submission, please refer to the HEDIS 2018, Volume 6: Specifications for the Medicare Health Outcomes Survey manual.[1,2]

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[1] National Committee for Quality Assurance. *HEDIS® 2018, Volume 6: Specifications for the Medicare Health Outcomes Survey*. Washington, DC: NCQA Publication, 2018. Available at: https://www.hosonline.org/globalassets/hos-online/publications/hos_hedis_volume6_2018.pdf. Accessed on: May 06, 2019.
[2] HEDIS® is a registered trademark of the National Committee for Quality Assurance.

Medicare HOS-M Instrument

The HOS-M instrument contains ADL items as the core items used to calculate the frailty adjustment factor.[3] The HOS-M instrument also contains the VR-12 to further assess the physical and mental health functioning of each PACE organization's members.[4,5] The HOS-M includes questions about the following: lifting or carrying objects as heavy as 10 pounds; walking a quarter mile; health or physical problems interfering with daily activities; receiving help with ADLs; physical and emotional health compared to one year ago; memory loss; urinary incontinence; and a question on whether the survey was self-completed or completed by a proxy. If the participant received assistance completing the survey, the proxy respondent was asked information about his/her relationship to the participant.

Detailed information about the Medicare HOS-M instrument can be found in the NCQA HEDIS 2018, Volume 6: Specifications for the Medicare Health Outcomes Survey manual, which can be downloaded from the Survey Administration section on the Program page of the HOS website.[1] The 2018 HOS-M questionnaire may also be downloaded from the Survey page of the HOS website (www.HOSonline.org). Copies of other HEDIS Volume 6 publications may be obtained by calling the NCQA Customer Support Telephone Line at 1-888-275-7585 or via NCQA's Publications Center (https://store.ncqa.org/).

Summary Measures

The key component of the HOS-M for assessment of the physical and mental health functioning is the VR-12 Health Survey.[6] The VR-12 consists of 14 items, 12 of which are used in the calculation of the eight health domains and the two summary measures: the physical component summary (PCS) and mental component summary (MCS) scores. The VR-12 measures the same eight health domains as the 36-item health survey: 1) Physical Functioning, 2) Role-Physical, 3) Role-Emotional, 4) Bodily Pain, 5) Social Functioning, 6) Mental Health, 7) Vitality, and 8) General Health. Each domain aggregates one or two items and all eight domains are used to calculate the two summary measures, as illustrated in the VR-12 mapping model on the following page. Two of the 14 items, which ask about change in physical health and emotional health compared to one year ago, are not used in the calculation of the PCS and MCS scores. The field names for the 14 items begin with the prefix "M21VR" in the data file.

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[3] Walsh EG, Khatustsky G, and Johnson L. Functional impairment levels in PACE enrollees. *Health Care Financing Review*. Summer 2008. Volume 29(4): 81-88. Available at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/downloads/2008Summerpg81.pdf. Accessed on: May 06, 2019.

[4] Jones D, Kazis LE, Lee A, Rogers W, Skinner K, Cassar L, Wilson N, Hendricks A. Health status assessments using the Veterans SF-36 and SF-12. Methods for evaluating outcomes in the Veterans Health Administration. *Journal of Ambulatory Care Management*. 2001; 24(3):1-19.

[5] Iqbal SU, Rogers W, Selim A, Qian S, Lee A, Ren XS, Rothendler J, Miller D, Kazis L. *The Veterans RAND 12 Item Health Survey (VR-12): What it is and How it is used. 2007*. Available at: https://hosonline.org/globalassets/hos-online/publications/veterans_rand_12_item_health_survey_vr-12_2007.pdf. Accessed on: May 06, 2019.

[6] Boston University School of Public Health. VR-36, VR-12 and VR-6D Overview. Available at: https://www.bu.edu/sph/about/departments/health-law-policy-and-management/research/vr-36-vr-12-and-vr-6d/. Accessed on: May 06, 2019.

Mapping of HOS-M VR-12 to 8 Health Domains and 2 Summary Measures

Items	Domains	Summary Measures
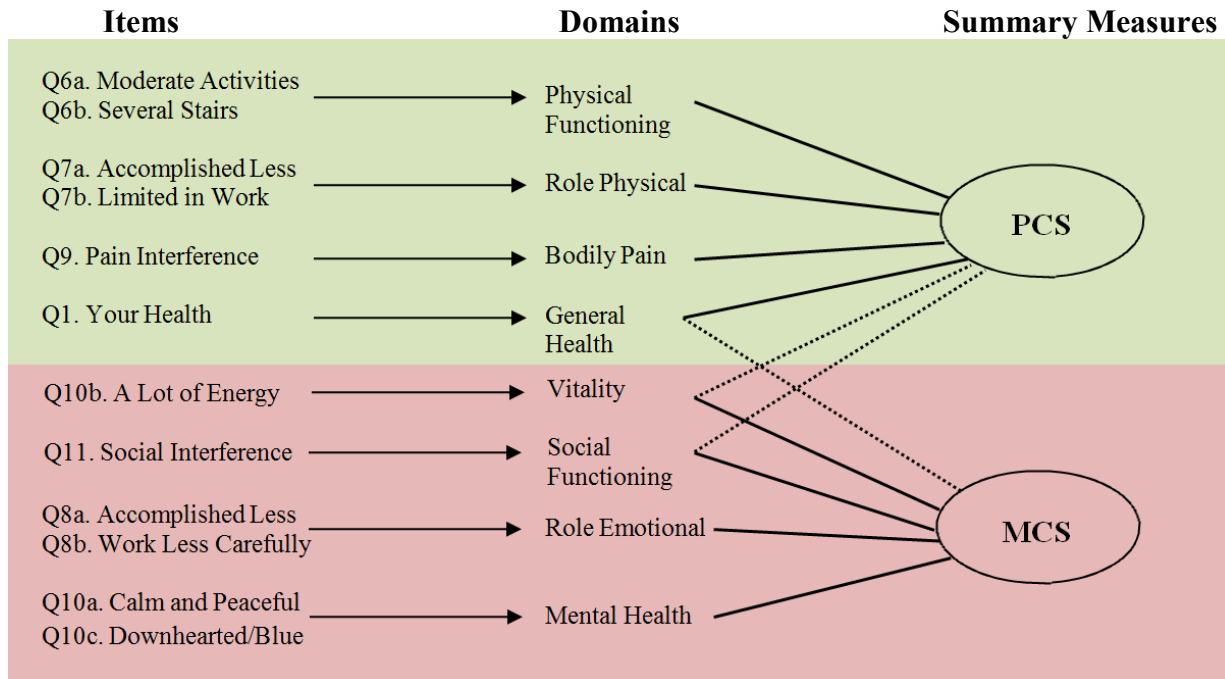
Note: Domains contributing the most to each summary measure are indicated by a solid line. Domains contributing to a lesser degree are indicated by a broken line. However, all domains contribute to some extent to the scoring of both summary measures (PCS and MCS).

The PCS and MCS scores were calculated from the VR-12 using the Modified Regression Estimate (MRE) for scoring and imputation of missing data.[5] The MRE is a general method for obtaining scale scores for the eight domains in the context of missing data. The MRE uses complete cases to estimate a regression equation where only those items that are present are used.

For those beneficiaries with complete responses across the VR-12, the following steps[7] were taken to calculate PCS and MCS:

- Step One: New variables were created for each response level choice with one level omitted. Using the 59 total response categories across the VR-12 questions, 47 indicator variables were created.
- Step Two: Aggregate PCS and MCS scores were created separately from a regression equation that weighted each of the 47 indicator variables. The weights were derived from the Veterans SF-36 PCS and MCS Scales using the 1999 Large Health Survey of Veteran Enrollees.

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[7] Spiro A, Rogers WH, Qian S, Kazis L. *Imputing physical and mental summary scores (PCS and MCS) for the Veterans SF-12 Health Survey in the context of missing data*. Technical Report prepared by: The Health Outcomes Technologies Program, Health Services Department, Boston University School of Public Health, Boston, MA and The Institute for Health Outcomes and Policy, Center for Health Quality, Outcomes and Economic Research, Veterans Affairs Medical Center, Bedford, MA. 2004. Available at: https://hosonline.org/globalassets/hos-online/publications/hos_veterans_12_imputation.pdf. Accessed on: May 06, 2019.

- Step Three: A constant was added to each of the estimates obtained from Step Two. The scores were then standardized using normative values from a 1990 U.S. general population. Therefore, a mean score of 50 represents the national average, a 10-point difference above and below the mean score is one standard deviation, and, with few exceptions, the scores have a range of 0 through 100 (higher being better).
- When a beneficiary had missing data across the VR-12 items, PCS and MCS scores were imputed using the MRE. With the use of the MRE algorithm, PCS and MCS scores can be calculated in as many as 90% of the cases in which one or more VR-12 responses are missing.[8] Depending on the pattern of missing item responses for a beneficiary, a different set of regression weights was required to compute that individual's PCS and/or MCS scores.[7] For each combination of missing data, the beneficiaries' data were merged with the stored regression weights and the PCS or MCS scores were computed and then standardized using the normative values from MRE Step Three.
- Beneficiary PCS and MCS results were mode adjusted for the impact of telephone administration compared with the reference mode of mail administration. Comparisons across the VR-12 of matched HOS and Veterans Administration surveys for the same respondents showed that PCS and MCS scores were, on average, 1.9 and 4.5 points greater respectively for telephone compared to mail administered surveys.[9] Therefore, for telephone surveys, 1.9 points were subtracted from the PCS score and 4.5 points were subtracted from the MCS score.
- For the physical health summary measure, very high scores indicate no physical limitations, disabilities, or decline in well-being; high energy level; and a rating of health as "excellent."
- For the mental health summary measure, very high scores indicate frequent positive affect, absence of psychological distress, and no limitations in usual social and role activities due to emotional problems.

For the HOS-M report, the PCS and MCS scores were *not* adjusted for case mix variables, i.e., demographic characteristics.

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[8] Selim A, Iqbal SU, Rogers W, Qian SX, Fincke BG, Rothender J, Kazis LE. *Medicare Health Outcomes Survey: An Alternative Case-Mix Methodology*. Technical Report prepared by: Center for Health Quality, Outcomes, and Economic Research, VA Medical Center, Bedford, Massachusetts 2007. Available at: https://hosonline.org/globalassets/hos-online/publications/hos_case_mix_final_technical_report.pdf. Accessed on: May 06, 2019.

[9] Rogers WH, Gandek B, Sinclair SJ. *Calculating Medicare Health Outcomes Survey Performance Measurement Results*. Technical Report prepared by: Health Assessment Lab, Waltham, MA, The Health Institute, Department of Clinical Care Research, New England Medical Center, Boston, MA. 2004. Available at: https://hosonline.org/globalassets/hos-online/publications/hos_calculating_pm_results.pdf. Accessed on: May 06, 2019.

Data File Characteristics

The file is a Comma Separated Value (CSV) file and was generated using PROC EXPORT with the DBMS=CSV option in SAS®[10] Version 9.4. The first row of the file contains the SAS variable names. The file can be imported directly into MS Excel or MS Access or converted back to SAS. If converting to SAS with PROC IMPORT, it is recommended to first set the SAS system option GUESSINGROWS to a high number (valid values 1-32767) to insure that character fields will not be truncated.

The 2018 HOS-M data file contains 102 fields. Field names contain the prefix M21, which indicates the corresponding round of HOS data collection. The only field without a prefix is the Health Insurance Claim number **HICNUM**, which is a unique alphanumeric identifier used to identify each beneficiary in the file.

Note that selected field attributes (i.e., field name, type, length, and/or label) may have been modified for some fields included in the 2018 HOS-M data file when compared to the same fields included in previous HOS-M data files. You may refer to Appendix A for detailed information regarding all field attributes contained in the 2018 HOS-M data file.

New Fields

There were no **new** fields in the 2018 HOS-M data file compared with the 2017 HOS-M data file.

Excluded Fields

There were no **excluded** fields in the 2018 HOS-M data file compared with the 2017 HOS-M data file.

Field Overview

The following is a general description of fields included in the HOS-M data file. The fields are listed in the order they appear in the file.

Identifier Fields (Fields 1 - 10)

This section contains the HICNUM, which is the unique alphanumeric identifier previously discussed. It also contains a unique beneficiary link key ID (M21BLKEY), end stage renal disease indicator (M21ESRD), institutional status (M21INSTUT), hospice status (M21HOSPICE), Medicaid status (M21MEDICAID), Dual status (M21DUAL), an anonymous beneficiary ID (M21PATID), an anonymous plan ID (M21PLAN), and the survey measurement year (M21RPTYR).

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[10] SAS® is a registered trademark of the SAS Institute Inc., Cary, NC

<u>Sample File Fields (Fields 11 - 35)</u>

This section contains contact, demographic, and other member level data for the sampled beneficiaries submitted in the Sample File by the survey vendor. These fields are obtained from the CMS Medicare Databases. None are obtained from the survey instrument. The plan name (M21PLANNM) and plan ID (M21PLANID) represent each member's plan assignment at the time of sampling in 2018. The Plan Benefit Package (PBP) number, M21PBPID, identifies the PBP to which the beneficiary belongs. A PACE plan may have one or more PBPs.

<u>Survey Instrument Fields (Fields 36 - 78)</u>

This section contains the member level responses collected from the 19 questions in the survey instrument. The following fields from the VR-12 survey are used to compute the PCS and MCS scores: M21VRGENHTH, M21VRMACT, M21VRSTAIR, M21VRPACCL, M21VRPWORK, M21VRMACCL, M21VRMWORK, M21VRPAIN, M21VRCALM, M21VRENERGY, M21VRDOWN, and M21VRSACT. Two items, M21VRPHCMP and M21VRMHCMP, are contained in the VR-12 survey but are not used to calculate the PCS and MCS scores.

<u>Vendor Generated Fields (Fields 79 - 83)</u>

This section contains member level survey administration fields generated by the survey vendor, e.g., the survey disposition code (M21SRVDSP), survey language (M21SVLANG), and survey date (M21SVDATE).

<u>Derived Fields (Fields 84 - 95)</u>

This section contains the following fields: flag to indicate completed surveys, flag to indicate ineligible surveys, dates in SAS date format, age, age and race categories, PCS and MCS scores, and a flag to indicate membership in the analytic sample. Age is calculated by counting the number of months between the SAS date fields for date of birth (M21TDOB) and survey date with missing values imputed (M21TSVDATIM), then dividing the result by 12 to produce an integer value for the whole number of years for the beneficiary's age.

<u>Plan Level Fields (Fields 96 - 102)</u>

This section contains the Plan type, Plan organization name, and Plan parent organization name obtained from the May 2018 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans from the CMS website at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/. The Plan state, Plan tax status, and Plan CMS region are obtained from the August 2018 HPMS Plan Contract List.

Appendix A

Data File Layout by Position

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
1	*HICNUM* HIC Number	Char	12		Unique beneficiary identifier
2	*M21BLKEY* Beneficiary Link Key	Char	13		Obtained from Sample File
3	*M21ESRD* ESRD Indicator	Num	3	0 = No ESRD 1 = ESRD	Obtained from CMS data
4	*M21INSTUT* Institutional Status	Num	3	0 = Out of Institution 1 = Institutionalized	Obtained from CMS data
5	*M21HOSPICE* Hospice Status	Num	3	0 = No hospice start date present 1 = Hospice start date present	Obtained from CMS data
6	*M21MEDICAID* Medicaid Status	Num	3	0 = Out of Medicaid 1 = In Medicaid (Full or Partial Benefit in March)	Obtained from CMS data
7	*M21DUAL* Dual Status	Num	3	0 = Not Dual Status 1 = Dual Status (Full Benefit any time during year)	Obtained from CMS data
8	*M21PATID* Anonymous Beneficiary ID	Num	8		Derived field Could be used as a database key if personally identifiable fields (e.g., HICNUM) were removed.
9	*M21PLAN* Anonymous Plan ID	Num	8		Derived field Could be used as a database key if plan identifiable fields (e.g., M21PLANID) were removed.
10	*M21RPTYR* Report Year	Num	8		HOS-M survey measurement year
11	*M21PLANNM* Plan Name	Char	60		Obtained from Sample File
12	*M21PLANTYPE* Plan Type	Char	8		Obtained from Sample File
13	*M21PLANID* Plan ID	Char	5		Obtained from Sample File
14	*M21PBPID* Plan Benefit Package Number	Char	3		Obtained from Sample File 3-digit number filled with leading zeros
15	*M21FNAME* Member First Name	Char	30		Obtained from Sample File
16	*M21MIDINIT* Member Middle Initial	Char	1		Obtained from Sample File
17	*M21LNAME* Member Last Name	Char	35		Obtained from Sample File
18	*M21ADDRS1* Address 1	Char	25		Obtained from Sample File Address fields M21ADDRS1-M21ADDRS6 from CMS Medicare Databases.

Field #	Field Name/ Description	Field Type	Field Length	Valid Values	Comments
19	*M21ADDRS2* Address 2	Char	25		Obtained from Sample File
20	*M21ADDRS3* Address 3	Char	25		Obtained from Sample File
21	*M21ADDRS4* Address 4	Char	25		Obtained from Sample File
22	*M21ADDRS5* Address 5	Char	25		Obtained from Sample File
23	*M21ADDRS6* Address 6	Char	25		Obtained from Sample File
24	*M21DOB* Date of Birth	Char	10		Obtained from Sample File
25	*M21GENDER* Gender	Num	8	1 = Male 2 = Female	Obtained from Sample File
26	*M21RACE* Race	Num	8	0 = Unknown 1 = White 2 = Black 3 = Other 4 = Asian 5 = Hispanic 6 = North American Native	Obtained from Sample File
27	*M21ADDRSS* Participant Street	Char	65		Obtained from Sample File Address Fields: M21ADDRSS, M21CITY, M21STATE, and M21ZIP originated from the Contact Data File developed by small plans, which may be more up to date than the CMS Medicare Databases.
28	*M21CITY* Participant City	Char	25		Obtained from Sample File
29	*M21STATE* Participant State	Char	20		Obtained from Sample File
30	*M21ZIP* Participant Zip Code	Char	20		Obtained from Sample File
31	*M21BENELANG* Participant Primary Language	Char	35		Obtained from Sample File
32	*M21RCVOMAIL* Participant Receives Own Mail	Char	35		Obtained from Sample File
33	*M21LVINFAC* Participant Lives in Facility	Char	40		Obtained from Sample File
34	*M21SHAREPH* Participant Shares a Phone	Char	13		Obtained from Sample File
35	*M21PACECTR* PACE Center, Care System, or Center Attended	Char	55		Obtained from Sample File

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
36	*M21VRGENHTH* Q1 General Health	Num	8	1 = Excellent 2 = Very Good 3 = Good 4 = Fair 5 = Poor	Entered from the survey (See Appendix B)
37	*M21DIFCARRY* Q2 Difficulty Lifting 10 Pounds	Num	8	1 = No difficulty at all 2 = A little difficulty 3 = Some difficulty 4 = A lot of difficulty 5 = Not able to do it	Entered from the survey (See Appendix B)
38	*M21DIFBLKS* Q3 Difficulty Walking 2-3 Blocks	Num	8	1 = No difficulty at all 2 = A little difficulty 3 = Some difficulty 4 = A lot of difficulty 5 = Not able to do it	Entered from the survey (See Appendix B)
39	*M21ADLBTH* Q4a Difficulty Bathing	Num	8	1 = No, I do not have difficulty 2 = Yes, I have difficulty 3 = I am unable to do this activity	Entered from the survey (See Appendix B)
40	*M21ADLDRS* Q4b Difficulty Dressing	Num	8	1 = No, I do not have difficulty 2 = Yes, I have difficulty 3 = I am unable to do this activity	Entered from the survey (See Appendix B)
41	*M21ADLEAT* Q4c Difficulty Eating	Num	8	1 = No, I do not have difficulty 2 = Yes, I have difficulty 3 = I am unable to do this activity	Entered from the survey (See Appendix B)
42	*M21ADLCHR* Q4d Difficulty In/Out Chairs	Num	8	1 = No, I do not have difficulty 2 = Yes, I have difficulty 3 = I am unable to do this activity	Entered from the survey (See Appendix B)
43	*M21ADLWLK* Q4e Difficulty Walking	Num	8	1 = No, I do not have difficulty 2 = Yes, I have difficulty 3 = I am unable to do this activity	Entered from the survey (See Appendix B)
44	*M21ADLTLT* Q4f Difficulty Using Toilet	Num	8	1 = No, I do not have difficulty 2 = Yes, I have difficulty 3 = I am unable to do this activity	Entered from the survey (See Appendix B)
45	*M21HLPBTH* Q5a Receive Help Bathing	Num	8	1 = Yes, I receive help 2 = No, I do not receive help 3 = I do not do this activity	Entered from the survey (See Appendix B)
46	*M21HLPDRE* Q5b Receive Help Dressing	Num	8	1 = Yes, I receive help 2 = No, I do not receive help 3 = I do not do this activity	Entered from the survey (See Appendix B)
47	*M21HLPEAT* Q5c Receive Help Eating	Num	8	1 = Yes, I receive help 2 = No, I do not receive help 3 = I do not do this activity	Entered from the survey (See Appendix B)
48	*M21HLPCHR* Q5d Receive Help In/Out Chairs	Num	8	1 = Yes, I receive help 2 = No, I do not receive help 3 = I do not do this activity	Entered from the survey (See Appendix B)
49	*M21HLPWLK* Q5e Receive Help Walking	Num	8	1 = Yes, I receive help 2 = No, I do not receive help 3 = I do not do this activity	Entered from the survey (See Appendix B)

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
50	*M21HLPTLT* Q5f Receive Help Using Toilet	Num	8	1 = Yes, I receive help 2 = No, I do not receive help 3 = I do not do this activity	Entered from the survey (See Appendix B)
51	*M21VRMACT* Q6a Limited Moderate Activities	Num	8	1 = Yes, limited a lot 2 = Yes, limited a little 3 = No, not limited at all	Entered from the survey (See Appendix B)
52	*M21VRSTAIR* Q6b Limited Climbing Several Stairs	Num	8	1 = Yes, limited a lot 2 = Yes, limited a little 3 = No, not limited at all	Entered from the survey (See Appendix B)
53	*M21VRPACCL* Q7a Physical Health Accomplished Less	Num	8	1 = No, none of the time 2 = Yes, a little of the time 3 = Yes, some of the time 4 = Yes, most of the time 5 = Yes, all of the time	Entered from the survey (See Appendix B)
54	*M21VRPWORK* Q7b Physical Health Limited Work Activities	Num	8	1 = No, none of the time 2 = Yes, a little of the time 3 = Yes, some of the time 4 = Yes, most of the time 5 = Yes, all of the time	Entered from the survey (See Appendix B)
55	*M21VRMACCL* Q8a Emotional Problems Accomplished Less	Num	8	1 = No, none of the time 2 = Yes, a little of the time 3 = Yes, some of the time 4 = Yes, most of the time 5 = Yes, all of the time	Entered from the survey (See Appendix B)
56	*M21VRMWORK* Q8b Emotional Problems Work Not Careful	Num	8	1 = No, none of the time 2 = Yes, a little of the time 3 = Yes, some of the time 4 = Yes, most of the time 5 = Yes, all of the time	Entered from the survey (See Appendix B)
57	*M21VRPAIN* Q9 Pain Interfere Past 4 Weeks	Num	8	1 = Not at all 2 = A little bit 3 = Moderately 4 = Quite a bit 5 = Extremely	Entered from the survey (See Appendix B)
58	*M21VRCALM* Q10a Past 4 Weeks Felt Calm/Peaceful	Num	8	1 = All of the time 2 = Most of the time 3 = A good bit of the time 4 = Some of the time 5 = A little of the time 6 = None of the time	Entered from the survey (See Appendix B)
59	*M21VRENERGY* Q10b Past 4 Weeks A Lot of Energy	Num	8	1 = All of the time 2 = Most of the time 3 = A good bit of the time 4 = Some of the time 5 = A little of the time 6 = None of the time	Entered from the survey (See Appendix B)
60	*M21VRDOWN* Q10c Past 4 Weeks Blue or Sad	Num	8	1 = All of the time 2 = Most of the time 3 = A good bit of the time 4 = Some of the time 5 = A little of the time 6 = None of the time	Entered from the survey (See Appendix B)

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
61	*M21VRSACT* Q11 Past 4 Weeks Phys or Emot Interfere Social Activities	Num	8	1 = All of the time 2 = Most of the time 3 = Some of the time 4 = A little of the time 5 = None of the time	Entered from the survey (See Appendix B)
62	*M21VRPHCMP* Q12 Physical Health Compared with One Year Ago	Num	8	1 = Much better 2 = Slightly better 3 = About the same 4 = Slightly worse 5 = Much worse	Entered from the survey (See Appendix B)
63	*M21VRMHCMP* Q13 Emotional Health Compared with One Year Ago	Num	8	1 = Much better 2 = Slightly better 3 = About the same 4 = Slightly worse 5 = Much worse	Entered from the survey (See Appendix B)
64	*M21MEMLOSS* Q14 Memory Loss Interferes with Daily Activities	Num	8	1 = Yes 2 = No	Entered from the survey (See Appendix B)
65	*M21EVERURN* Q15 How Often Difficulty Controlling Urination	Num	8	1 = Never 2 = Less than once a week 3 = Once a week or more often 4 = Daily 5 = Catheter	Entered from the survey (See Appendix B)
66	*M21CMPWHO* Q16 Who Completed Survey Form	Num	8	1 = Medicare participant 2 = Family member, relative, or friend of Medicare Participant 3 = Nurse or other health professional	Entered from the survey (See Appendix B)
67	*M21PROXRSN1* Q17 Reason Filled Out Due to Physical Problems	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
68	*M21PROXRSN2* Q17 Reason Filled Out Due to Memory Loss or Mental Problems	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
69	*M21PROXRSN3* Q17 Reason Filled Out Due to Unable to Speak/Read English	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
70	*M21PROXRSN4* Q17 Reason Filled Out Due to Person Not Available	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
71	*M21PROXRSN5* Q17 Reason Filled Out Due to Other	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
72	*M21PROXHOW1* Q18 Helped Read Questions to the Person	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
73	*M21PROXHOW2* Q18 Helped Write Down Answers	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
74	*M21PROXHOW3* Q18 Helped Answer Based on Experience with Person	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
75	*M21PROXHOW4* Q18 Helped By Using Medical Records to Fill Out Survey	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
76	*M21PROXHOW5* Q18 Helped Translate the Survey	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
77	*M21PROXHOW6* Q18 Helped Other	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
78	*M21CAREPOS* Q19 Staff/Caregivers Position	Num	8	1 = Home Health Aide, Personal Care Attendant, or Certified Nursing Assistant 2 = Nurse (RN, LPN, or NP) 3 = Social Worker or Case Manager 4 = Adult Foster Care, Adult Day Care, Assisted Living, or Residential Care Staff 5 = Interpreter 6 = Other 7 = Appropriately skipped	Entered from the survey (See Appendix B)

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
79	*M21SRVDSP* Disposition of Survey	Char	3	M10/T10 = Complete survey (Q4a-f answered) M11/T11 = Non-response: partial complete survey (one or more of Q4a-f missing) **Ineligible:** M20/T20 = deceased M21/T21 = not enrolled in health plan M23/T23 = language barrier T24 = bad address AND phone number M25/T25 = removed from sample by RTI M26/T26 = Duplicate: beneficiary listed twice in sample **Non-response:** M32/T32 = refusal by member M33/T33 = unavailable M34/T34 = physically or mentally incapacitated M35/T35 = institutionalized M36/T36 = after maximum attempts M37/T37 = refusal by proxy M38/T38 = gatekeeper refusal	Generated by the survey vendor (M=Mail and T=Telephone)
80	*M21RNDNUM* Survey Round	Char	3	M1 = 1st Mailing M2 = 2nd Mailing T1 = 1st Telephone T2 = 2nd Telephone T3 = 3rd Telephone T4 = 4th Telephone T5 = 5th Telephone T6 = 6th Telephone T7 = 7th Telephone T8 = 8th Telephone T9 = 9th Telephone T10 = 10th Telephone T11 = 11th Telephone T12 = 12th Telephone MT = Partially completed by mail and converted to complete by telephone NC = Not completed	Generated by the survey vendor

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
81	*M21PCTANS* Percentage of Survey Questions Answered	Num	8		Generated by the survey vendor Based on the 31 responses for M21VRGENHTH (field 36) to M21CMPWHO (field 66) and the survey disposition M21SRVDSP (field 79). If M21SRVDSP = M10, T10, M11, or T11 then M21PCTANS = (number answered)/31*100; otherwise M21PCTANS=0.
82	*M21SVLANG* Survey Language	Char	1	C = Chinese E = English O = Other S = Spanish	Generated by the survey vendor
83	*M21SVDATE* Date Survey Was Completed	Char	8		Generated by the survey vendor Date mail survey received or date of telephone interview by survey vendor. Displayed as MMDDYYYY
84	*M21CMPSRV* Completed Survey (All ADLs Q4a-f answered)	Num	8	0 = Incomplete Survey 1 = Completed Survey	Derived field Based on the six ADL questions ADLBTH (field 39) to ADLTLT (field 44). If all six ADLs are answered then M21CMPSRV = 1; otherwise M21CMPSRV = 0.
85	*M21INVSRV* Ineligible Survey Flag	Num	8	0 = Eligible 1 = Ineligible	Derived field Ineligible survey includes these members: deceased, not enrolled in the health plan, had an incorrect address and phone number, had a language barrier or were removed from sample due to disenrollment or institutionalization.
86	*M21TDOB* Date of Birth (SAS Date)	Num	8		Derived SAS date field SAS date equivalent of M21DOB. MMDDYY10. format.
87	*M21TSVDATE* Date of Survey (SAS Date)	Num	8		Derived SAS date field SAS date equivalent of M21SVDATE. MMDDYY10. format.
88	*M21TSVDATIM* Date of Survey (SAS Date with Missing Values Imputed)	Num	8		Derived SAS date field If M21TSVDATE is missing, then M21TSVDATIM = 04/27/2018; otherwise M21TSVDATIM = M21TSVDATE MMDDYY10. format.
89	*M21TDOELMT* Date of Accretion Limit - 03/01/2018 (SAS Date)	Num	8		Derived SAS date field 03/01/2018 for all records. MMDDYY10. format.

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
90	*M21AGE* Age (Exact Calculation)	Num	8		Derived field Calculated from M21TDOB and M21TSVDATIM
91	*M21AGECAT* Age Groups (6 Categories from Calculated AGE)	Num	8	1 = 55 to 64 years 2 = 65 to 69 years 3 = 70 to 74 years 4 = 75 to 79 years 5 = 80 to 84 years 6 = 85 years or older	Derived field Obtained from M21AGE
92	*M21RACECAT* Race Groups (3 Categories from CMS Race)	Num	8	1 = White 2 = Black 3 = Other	Derived field Obtained from M21RACE
93	*M21PCS* Physical Component Summary Score	Num	8		Derived field Unadjusted PCS score.
94	*M21MCS* Mental Component Summary Score	Num	8		Derived field Unadjusted MCS score.
95	*M21ANALYT* Analytic Sample Indicator	Num	8	0 = Not included in analytic sample 1 = Included in analytic sample	Derived field
96	*M21PLTYPE* Plan Type - source CMS 05/18	Char	39		Obtained from the May 2018 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans
97	*M21PLORGNM* Plan Organization Name - source CMS 05/18	Char	50		Obtained from the May 2018 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans
98	*M21PLPTORG* Plan Parent Organization Name- source CMS 05/18	Char	50		Obtained from the May 2018 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans
99	*M21PLANSTN* Plan State - source HPMS 08/18	Char	2		Obtained from the August 2018 HPMS Plan Contract List.
100	*M21PLTAXST* Plan Tax Status - source HPMS 08/18	Char	25		Obtained from the August 2018 HPMS Plan Contract List.
101	*M21PLNDCT* Duration of Plan Contract Categories	Num	8	1 = less than 1 year 2 = 1 to 4 years 3 = 5 to 9 years 4 = 10 years or more	Obtained from the August 2018 HPMS Plan Contract List.

FIELD #	FIELD NAME/ DESCRIPTION	FIELD TYPE	FIELD LENGTH	VALID VALUES	COMMENTS
102	*M21PLREGCDE* Plan CMS Region Code	Num	3	1 = Region 1 - Boston (CT, ME, MA, NH, RI, VT) 2 = Region 2 - New York (NJ, NY, PR, VI) 3 = Region 3 - Philadelphia (DC, DE, MD, PA, VA, WV) 4 = Region 4 – Atlanta (AL, FL, GA, KY, MS, NC, SC, TN) 5 = Region 5 - Chicago (IL, IN, MI, MN, OH, WI) 6 = Region 6 - Dallas (AR, LA, NM, OK, TX) 7 = Region 7 - Kansas City (IA, KS, MO, NE) 8 = Region 8 - Denver (CO, MT, ND, SD, UT, WY) 9 = Region 9 - San Francisco (AZ, CA, Guam, HI, NV) 10 = Region 10 - Seattle (AK, ID, OR, WA)	Derived from the August 2018 HPMS Plan Contract List

Appendix B (Annotated Survey Form)

2018 Medicare Health Outcomes Survey–Modified

1. In general, would you say your health is:

   M21VRGENHTH

Excellent	Very good	Good	Fair	Poor
□₁	□₂	□₃	□₄	□₅

2. How much difficulty, if any, do you have lifting or carrying objects as heavy as 10 pounds, such as a sack of potatoes?

   M21DIFCARRY

No difficulty at all	A little difficulty	Some difficulty	A lot of difficulty	Not able to do it
□₁	□₂	□₃	□₄	□₅

3. How much difficulty, if any, do you have walking a quarter of a mile—that is about 2 or 3 blocks?

   M21DIFBLKS

No difficulty at all	A little difficulty	Some difficulty	A lot of difficulty	Not able to do it
□₁	□₂	□₃	□₄	□₅

4. Because of a health or physical problem, do you have any difficulty doing the following activities **without special equipment or help from another person?**

	No, I do not have difficulty	Yes, I have difficulty	I am unable to do this activity
a. Bathing …………………... **M21ADLBTH**	□₁	□₂	□₃
b. Dressing …………………... **M21ADLDRS**	□₁	□₂	□₃
c. Eating …………………... **M21ADLEAT**	□₁	□₂	□₃
d. Getting in or out of chairs. **M21ADLCHR**	□₁	□₂	□₃
e. Walking …………………... **M21ADLWLK**	□₁	□₂	□₃
f. Using the toilet ………….. **M21ADLTLT**	□₁	□₂	□₃

5. Do you receive **help from another person** with any of these activities?

		Yes, I receive help	No, I do not receive help	I do not do this activity
a.	Bathing …………………. **M21HLPBTH**	1 ☐	2 ☐	3 ☐
b.	Dressing ………………... **M21HLPDRE**	1 ☐	2 ☐	3 ☐
c.	Eating ….………………... **M21HLPEAT**	1 ☐	2 ☐	3 ☐
d.	Getting in or out of chairs. **M21HLPCHR**	1 ☐	2 ☐	3 ☐
e.	Walking ………………….. **M21HLPWLK**	1 ☐	2 ☐	3 ☐
f.	Using the toilet ………….. **M21HLPTLT**	1 ☐	2 ☐	3 ☐

6. The following items are about activities you might do during a typical day. Does **your health now limit you** in these activities? If so, how much?

ACTIVITIES		Yes, limited a lot	Yes, limited a little	No, not limited at all
a.	**Moderate activities,** such as moving a table, pushing a vacuum cleaner, bowling, or playing golf …………. **M21VRMACT**	1 ☐	2 ☐	3 ☐
b.	Climbing **several** flights of stairs. **M21VRSTAIR**	1 ☐	2 ☐	3 ☐

7. **During the past 4 weeks,** have you had any of the following problems with your work or other regular daily activities **as a result of your physical health?** (If you are not able to do work or regular daily activities, please answer 'yes, all of the time' to both questions).

		No, none of the time	Yes, a little of the time	Yes, some of the time	Yes, most of the time	Yes, all of the time
a.	**Accomplished less** than you would like ……….. **M21VRPACCL**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
b.	Were limited in the **kind** of work or other activities.. **M21VRPWORK**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

8. **During the past 4 weeks,** have you had any of the following problems with your regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)? (If you are not able to do work or regular daily activities, please answer 'yes, all of the time' to both questions.)

	No, none of the time	**Yes, a little of the time**	**Yes, some of the time**	**Yes, most of the time**	**Yes, all of the time**
a. **Accomplished less** than you would like ……… M21VRMACCL	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
b. Didn't do work or other activities as **carefully** as usual…………… M21VRMWORK	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

9. **During the past 4 weeks,** how much did **pain** interfere with your normal work (including both work outside the home and housework)?

M21VRPAIN

Not at all	**A little bit**	**Moderately**	**Quite a bit**	**Extremely**
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

These questions are about how you feel and how things have been with you **during the past four weeks.** For each question, please give the one answer that comes closest to the way you have been feeling.

10. How much of the time **during the past 4 weeks**:

	All of the time	**Most of the time**	**A good bit of the time**	**Some of the time**	**A little of the time**	**None of the time**
a. have you felt **calm and peaceful**?.......... M21VRCALM	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
b. did you have **a lot of energy**? …….......... M21VRENERGY	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
c. have you felt **downhearted and blue**?... M21VRDOWN	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐

11. **During the past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?

M21VRSACT

All of the time	**Most of the time**	**Some of the time**	**A little of the time**	**None of the time**
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Now, we'd like to ask you some questions about how your health may have changed.

12. **Compared to <u>one year ago</u>,** how would you rate your **physical health** in general **now?**

Much better	Slightly better	About the same	Slightly worse	Much worse
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

13. **Compared to one year ago,** how would you rate your **emotional problems** (such as feeling anxious, depressed or irritable) in general **now?**

Much better	Slightly better	About the same	Slightly worse	Much worse
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

14. Do you experience memory loss that interferes with daily activities?

1 ☐ Yes

2 ☐ No

15. How often, if ever, do you have difficulty controlling urination (bladder accidents)?

Never	Less than once a week	Once a week or more often	Daily	Catheter
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

16. Who completed this survey form?

1 ☐ Medicare Participant → *STOP HERE*

2 ☐ Family member, relative, or friend of Medicare Participant → *Go to Question 17*

3 ☐ Nurse or other health professional → *Go to Question 17*

17. What was the reason you filled out this survey for someone else? (Please answer **ALL** that apply.)

1 ☐ Physical problems   **M21PROXRSN1**

2 ☐ Memory loss or mental problems   **M21PROXRSN2**

3 ☐ Unable to speak or read English   **M21PROXRSN3**

4 ☐ Person not available   **M21PROXRSN4**

5 ☐ Other   **M21PROXRSN5**

18. How did you help complete this survey? (Please answer **ALL** that apply.)

1 ☐ Read the questions to the person   **M21PROXHOW1**

2 ☐ Wrote down the person's answers   **M21PROXHOW2**

3 ☐ Answered the questions based on my experience with the person   **M21PROXHOW3**

4 ☐ Used medical records to fill out the survey   **M21PROXHOW4**

5 ☐ Translated the survey questions   **M21PROXHOW5**

6 ☐ Other   **M21PROXHOW6**

FOR PROFESSIONAL STAFF (CAREGIVERS) ONLY

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19. Which of the following **best describes** your position? (Please choose **one** answer.)

1 ☐ Home Health Aide, Personal Care Attendant, or Certified Nursing Assistant

2 ☐ Nurse (RN, LPN, or NP)   **M21CAREPOS**

3 ☐ Social Worker or Case Manager

4 ☐ Adult Foster Care/Adult Day Care/Assisted Living/Residential Care Staff

5 ☐ Interpreter

6 ☐ Other

YOU HAVE COMPLETED THE SURVEY. THANK YOU.