If you experience problems accessing any portion of our files, please contact CMS at HOS@cms.hhs.gov.



2017 MEDICARE HEALTH OUTCOMES SURVEY-MODIFIED

> DATA USERS GUIDE

MEDICARE HEALTH OUTCOMES SURVEY



CENTERS FOR MEDICARE & MEDICAID SERVICES

> HEALTH SERVICES ADVISORY GROUP

Table of Contents

Preface	1
Medicare Health Outcomes Survey	1
Medicare Health Outcomes Survey-Modified	
Statutory Authority	
Technical Assistance	2
Aethodology and Design	3
Sampling Methodology	3
Aedicare HOS-M Instrument	4
Summary Measures	4
Data File Characteristics	7
New Fields	7
Excluded Fields	
Field Overview	7
Appendix A	9
Data File Layout by Position	9
Appendix B (Annotated Survey Form)	.19
2017 Medicare Health Outcomes Survey–Modified	. 19

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 2017 **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, 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 http://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 115 PACE organizations participated in the HOS-M in 2017. 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 http://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 2017, Volume 6: Specifications for the Medicare Health Outcomes Survey manual.^{1,2}

¹ National Committee for Quality Assurance. *HEDIS*[®] 2017, *Volume 6: Specifications for the Medicare Health Outcomes Survey*. Washington, DC: NCQA Publication, 2017. Available at: http://www.hosonline.org/globalassets/hos-online/publications/hos_hedis_volume6_2017.pdf. Accessed on: May 08, 2018. 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 2017, 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 2017 HOS-M questionnaire may also be downloaded from the Survey page of the HOS website (http://www.hosonline.org). Copies of other HEDIS Volume 6 publications may be purchased by calling the NCQA Customer Support Telephone Line at 1-888-275-7585 or via NCQA's Publications Center (http://www.ncqa.org/publications).

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 8 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 "M20VR" in the data file.

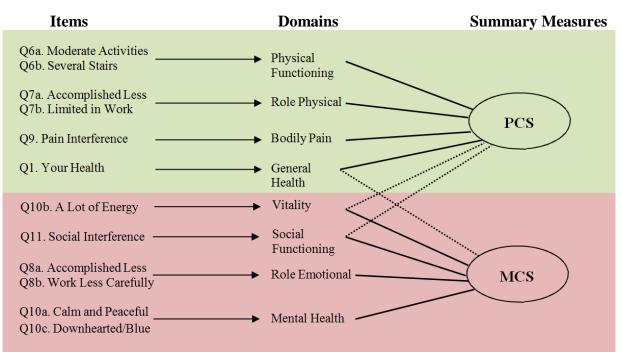
³ Walsh EG, Khatustsky G, and Johnson L. Functional impairment levels in PACE enrollees. *Health Care Financing Review*. Summer 2008. Volume 29(4): 81-88. Available at: http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/downloads/2008Summerpg81.pdf. Accessed on: May 08, 2018.

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: http://hosonline.org/globalassets/hosonline/publications/veterans_rand_12_item_health_survey_vr-12_2007.pdf. Accessed on: May 08, 2018.

⁶ Boston University School of Public Health. VR-36, VR-12 and VR-6D Overview. Available at: http://www.bu.edu/sph/research/research-landing-page/vr-36-vr-12-and-vr-6d/. Accessed on: May 08, 2018.

Mapping of HOS-M VR-12 to 8 Health Domains and 2 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 steps⁷ 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.

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: http://hosonline.org/globalassets/hos-online/publications/hos_veterans_12_imputation.pdf. Accessed on: May 08, 2018.

- 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).
- PCS and MCS scores were imputed using the MRE when beneficiary data was missing across the VR-12 items. Using 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.

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

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: http://hosonline.org/globalassets/hos-online/publications/hos_case_mix_final_technical_report.pdf. Accessed on: May 08, 2018.

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: http://hosonline.org/globalassets/hos-online/publications/hos_calculating_pm_results.pdf. Accessed on: May 08, 2018.

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 9.3. 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 2017 HOS-M data file contains 102 fields. Field names contain the prefix M20, 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 2017 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 2017 HOS-M data file.

New Fields

There was one **new** field in the 2017 HOS-M data file compared with the 2016 HOS-M data file.

• M20DUAL – Beneficiaries who receive full Medicaid benefits for one or more months from April of the previous year through March of the survey administration year. The new field differs from M20MEDICAID, which describes beneficiaries who receive either full or partial Medicaid benefits in March of the survey administration year.

Excluded Fields

There were no **excluded** fields in the 2017 HOS-M data file compared with the 2016 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 (M20BLKEY), end stage renal disease indicator (M20ESRD), institutional status (M20INSTUT), hospice status

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

(M20HOSPICE), Medicaid status (M20MEDICAID), Dual status (M20DUAL), an anonymous beneficiary ID (M20PATID), an anonymous plan ID (M20PLAN), and the survey measurement year (M20RPTYR).

Sample File Fields (Fields 11 - 35)

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 (M20PLANNM) and plan ID (M20PLANID) represent each member's plan assignment at the time of sampling in 2017. The Plan Benefit Package (PBP) number, M20PBPID, identifies the PBP to which the beneficiary belongs. A PACE plan may have one or more PBPs.

Survey Instrument Fields (Fields 36 - 78)

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: M20VRGENHTH, M20VRMACT, M20VRSTAIR, M20VRPACCL, M20VRPWORK, M20VRMACCL, M20VRMWORK, M20VRPAIN, M20VRCALM, M20VRENERGY, M20VRDOWN, and M20VRSACT. Two items, M20VRPHCMP and M20VRMHCMP, are contained in the VR-12 survey but are not used to calculate the PCS and MCS scores.

Vendor Generated Fields (Fields 79 - 83)

This section contains member level survey administration fields generated by the survey vendor, e.g., the survey disposition code (M20SRVDSP), survey language (M20SVLANG), and survey date (M20SVDATE).

Derived Fields (Fields 84 - 95)

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 (M20TDOB) and survey date with missing values imputed (M20TSVDATIM), then dividing the result by 12 to produce an integer value for the whole number of years for the beneficiary's age.

Plan Level Fields (Fields 96 - 102)

This section contains the Plan type, Plan organization name, and Plan parent organization name obtained from the May 2017 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans from the CMS website at: http://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 2017 HPMS Plan Contract List.

Appendix A

Data File Layout by Position

FIELD	FIELD NAME/	FIELD	FIELD	VALID		
#	DESCRIPTION	Түре	LENGTH	VALUES	COMMENTS	
1	<i>HICNUM</i> HIC Number	Char	12		Unique beneficiary identifier	
2	M20BLKEY Beneficiary Link Key	Char	13		Obtained from Sample File	
3	M20ESRD ESRD Indicator	Num	3	0 = No ESRD 1 = ESRD	Obtained from CMS data	
4	M20INSTUT Institutional Status	Num	3	0 = Out of Institution 1 = Institutionalized	Obtained from CMS data	
5	M20HOSPICE Hospice Status	Num	3	0 = No hospice start date present 1 = Hospice start date present	Obtained from CMS data	
6	M20MEDICAID Medicaid Status	Num	3	0 = Out of Medicaid 1 = In Medicaid (Full or Partial Benefit in March)	Obtained from CMS data	
7	M20DUAL Dual Status	Num	3	0 = Not Dual Status 1 = Dual Status (Full Benefit any time during year)	Obtained from CMS data	
8	<i>M20PATID</i> Anonymous Beneficiary ID	Num	8		Derived field Could be used as a database key if personally identifiable fields (e.g., HICNUM) were removed.	
9	M20PLAN Anonymous Plan ID	Num	8		Derived field Could be used as a database key if plan identifiable fields (e.g., M20PLANID) were removed.	
10	<i>M20RPTYR</i> Report Year	Num	8		HOS-M survey measurement year	
11	M20PLANNM Plan Name	Char	60		Obtained from Sample File	
12	<i>M20PLANTYPE</i> Plan Type	Char	8		Obtained from Sample File	
13	M20PLANID Plan ID	Char	5		Obtained from Sample File	
14	<i>M20PBPID</i> Plan Benefit Package Number	Char	3		Obtained from Sample File 3-digit number filled with leading zeros	
15	M20FNAME Member First Name	Char	30		Obtained from Sample File	
16	<i>M20MIDINIT</i> Member Middle Initial	Char	1		Obtained from Sample File	
17	<i>M20LNAME</i> Member Last Name	Char	35		Obtained from Sample File	
18	M20ADDRS1 Address 1	Char	25	Obtained from Sampl Address fields M20A M20ADDRS6 from C Medicare Databases.		

FIELD #	FIELD NAME/ DESCRIPTION	Field Type	Field Length	VALID VALUES	Comments	
19	M20ADDRS2 Address 2	Char	25		Obtained from Sample File	
20	M20ADDRS3 Address 3	Char	25		Obtained from Sample File	
21	M20ADDRS4 Address 4	Char	25		Obtained from Sample File	
22	M20ADDRS5 Address 5	Char	25		Obtained from Sample File	
23	M20ADDRS6 Address 6	Char	25		Obtained from Sample File	
24	M20DOB Date of Birth	Char	10		Obtained from Sample File	
25	M20GENDER Gender	Num	8	1 = Male 2 = Female	Obtained from Sample File	
26	M20RACE Race	Num	8	0 = Unknown 1 = White 2 = Black 3 = Other 4 = Asian 5 = Hispanic 6 = North American Native	Obtained from Sample File	
27	M20ADDRSS Participant Street	Char	65		Obtained from Sample File Address Fields: M20ADDRSS, M20CITY, M20STATE, and M20ZIP originated from the Contact Data File developed by small plans, which may be more up to date than the CMS Medicare Databases.	
28	M20CITY Participant City	Char	25		Obtained from Sample File	
29	M20STATE Participant State	Char	20		Obtained from Sample File	
30	M20ZIP Participant Zip Code	Char	20		Obtained from Sample File	
31	M20BENELANG Participant Primary Language	Char	35		Obtained from Sample File	
32	M20RCVOMAIL Participant Receives Own Mail	Char	35		Obtained from Sample File	
33	<i>M20LVINFAC</i> Participant Lives in Facility	Char	40		Obtained from Sample File	
34	M20SHAREPH Participant Shares a Phone	Char	13		Obtained from Sample File	
35	M20PACECTR 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	<i>M20VRGENHTH</i> Q1 General Health	Num	8	1 = Excellent 2 = Very Good 3 = Good 4 = Fair 5 = Poor	Entered from the survey (See Appendix B)
37	<i>M20DIFCARRY</i> 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	M20DIFBLKS 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	<i>M20ADLBTH</i> 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	M20ADLDRS 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	<i>M20ADLEAT</i> 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	M20ADLCHR 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	M20ADLWLK 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	M20ADLTLT 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	<i>M20HLPBTH</i> 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	M20HLPDRE 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	<i>M20HLPEAT</i> Q5c Receive Help Eating	Num	8	1 = Yes, I receive helpEntered from the surv2 = No, I do not receive help(See Appendix B)3 = I do not do this activity3	
48	M20HLPCHR Q5d Receive Help In/Out Chairs	Num	8	1 = Yes, I receive helpEntered from the surve2 = No, I do not receive help(See Appendix B)3 = I do not do this activity	
49	<i>M20HLPWLK</i> 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/	FIELD	FIELD	VALID	COMMENTS
#	DESCRIPTION	Түре	LENGTH	VALUES	
50	M20HLPTLT Q5f Receive Help	Num	8	1 = Yes, I receive help 2 = No, I do not receive help	Entered from the survey (See Appendix B)
	Using Toilet			3 = I do not do this activity	
51	M20VRMACT	Num	8	1 = Yes, limited a lot	Entered from the survey
	Q6a Limited Moderate Activities			2 = Yes, limited a little	(See Appendix B)
52	M20VRSTAIR	Num	8	3 = No, not limited at all 1 = Yes, limited a lot	Enternal former the surgery
52	Q6b Limited Climbing	Num	8	1 = Yes, limited a lot 2 = Yes, limited a little	Entered from the survey
	Several Stairs			3 = No, not limited at all	(See Appendix B)
53	M20VRPACCL	Num	8	1 = No, none of the time	Entered from the survey
55	Q7a Physical Health	INUITI	0	2 = Yes, a little of the time	(See Appendix B)
	Accomplished Less			3 = Yes, some of the time	(See Appendix B)
	···· F · · · · · · · ·			4 = Yes, most of the time	
				5 = Yes, all of the time	
54	M20VRPWORK	Num	8	1 = No, none of the time	Entered from the survey
	Q7b Physical Health			2 = Yes, a little of the time	(See Appendix B)
	Limited Work			3 = Yes, some of the time	
	Activities			4 = Yes, most of the time	
				5 = Yes, all of the time	
55	M20VRMACCL	Num	8	1 = No, none of the time	Entered from the survey
	Q8a Emotional Problems			2 = Yes, a little of the time $3 =$ Yes, some of the time	(See Appendix B)
	Accomplished Less			4 = Yes, most of the time	
	Accomplished Less			5 = Yes, all of the time	
56	M20VRMWORK	Num	8	1 = No, none of the time	Entered from the survey
20	Q8b Emotional	1 (0111	Ũ	2 = Yes, a little of the time	(See Appendix B)
	Problems Work Not			3 = Yes, some of the time	(
	Careful			4 = Yes, most of the time	
				5 = Yes, all of the time	
57	M20VRPAIN	Num	8	1 = Not at all	Entered from the survey
	Q9 Pain Interfere Past			2 = A little bit	(See Appendix B)
	4 Weeks			3 = Moderately 4 = Ovite a bit	
				4 = Quite a bit 5 = Extremely	
58	M20VRCALM	Num	8	1 = All of the time	Entered from the survey
50	Q10a Past 4 Weeks	INUIII	0	2 = Most of the time	(See Appendix B)
	Felt Calm/Peaceful			3 = A good bit of the time	(See Appendix B)
				4 = Some of the time	
				5 = A little of the time	
				6 = None of the time	
59	M20VRENERGY	Num	8	1 = All of the time	Entered from the survey
	Q10b Past 4 Weeks A			2 = Most of the time	(See Appendix B)
	Lot of Energy			3 = A good bit of the time	
				4 = Some of the time 5 = A little of the time	
				5 = A in the of the time 6 = None of the time	
60	M20VRDOWN	Num	8	1 = All of the time	Entered from the survey
00	Q10c Past 4 Weeks	1 vulli	0	2 = Most of the time	(See Appendix B)
	Blue or Sad			3 = A good bit of the time	(See Appendix B)
				4 = Some of the time	
				5 = A little of the time	
				6 = None of the time	

FIELD #	FIELD NAME/ DESCRIPTION	Field Type	Field Length	VALID VALUES	COMMENTS
61	M20VRSACT 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	<i>M20VRPHCMP</i> 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	M20VRMHCMP 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	M20MEMLOSS Q14 Memory Loss Interferes with Daily Activities	Num	8	1 = Yes 2 = No	Entered from the survey (See Appendix B)
65	M20EVERURN 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	M20CMPWHO 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	M20PROXRSN1 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	M20PROXRSN2 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	M20PROXRSN3 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	M20PROXRSN4 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	M20PROXRSN5 Q17 Reason Filled Out Due to Other	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
72	M20PROXHOW1 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	M20PROXHOW2 Q18 Helped Write Down Answers	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
74	M20PROXHOW3 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	M20PROXHOW4 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	M20PROXHOW5 Q18 Helped Translate the Survey	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
77	M20PROXHOW6 Q18 Helped Other	Num	8	0 = No 1 = Yes 7 = Appropriately skipped	Entered from the survey (See Appendix B)
78	<i>M20CAREPOS</i> Q19 Staff/Caregivers Position	Num	8	 Home Health Aide, Personal Care Attendant, or Certified Nursing Assistant Nurse (RN, LPN, or NP) Social Worker or Case Manager Adult Foster Care, Adult Day Care, Assisted Living, or Residential Care Staff Interpreter Other Appropriately skipped 	Entered from the survey (See Appendix B)

FIELD	FIELD NAME/	FIELD	FIELD	VALID	
#	DESCRIPTION	Туре	LENGTH	VALUES	COMMENTS
11 79	M20SRVDSP 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	M20RNDNUM Survey Round	Char	3	$ \begin{array}{rcl} M1 &=& 1^{st} \ Mailing \\ M2 &=& 2^{nd} \ Mailing \\ T1 &=& 1^{st} \ Telephone \\ T2 &=& 2^{nd} \ Telephone \\ T3 &=& 3^{rd} \ Telephone \\ T4 &=& 4^{th} \ Telephone \\ T5 &=& 5^{th} \ Telephone \\ T6 &=& 6^{th} \ Telephone \\ T7 &=& 7^{th} \ Telephone \\ T8 &=& 8^{th} \ Telephone \\ T9 &=& 9^{th} \ Telephone \\ T10 &=& 10^{th} \ Telephone \\ T11 &=& 11^{th} \ Telephone \\ T12 &=& 12^{th} \ Telephone \\ MT &=& Partially \ completed \ by \\ mail \ and \ converted \ to \\ complete \ by \ telephone \\ NC &=& Not \ completed \\ \end{array} $	Generated by the survey vendor

FIELD #	FIELD NAME/ Description	Field Type	Field Length	VALID VALUES	COMMENTS
81	<i>M20PCTANS</i> Percentage of Survey Questions Answered	Num	8		Generated by the survey vendor Based on the 31 responses for M20VRGENHTH (field 36) to M20CMPWHO (field 66) and the survey disposition M20SRVDSP (field 79). If M20SRVDSP = M10, T10, M11, or T11 then M20PCTANS = (number answered)/31*100; otherwise M20PCTANS=0.
82	M20SVLANG Survey Language	Char	1	C = Chinese E = English O = Other S = Spanish	Generated by the survey vendor
83	M20SVDATE 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	M20CMPSRV 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 38) to ADLTLT (field 43). If all six ADLs are answered then M20CMPSRV = 1; otherwise M20CMPSRV = 0.
85	<i>M20INVSRV</i> 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	<i>M20TDOB</i> Date of Birth (SAS Date)	Num	8		Derived SAS date field SAS date equivalent of M20DOB. MMDDYY10. format.
87	<i>M20TSVDATE</i> Date of Survey (SAS Date)	Num	8		Derived SAS date field SAS date equivalent of M20SVDATE. MMDDYY10. format.
88	<i>M20TSVDATIM</i> Date of Survey (SAS Date with Missing Values Imputed)	Num	8		Derived SAS date field If M20TSVDATE is missing, then M20TSVDATIM = 04/27/2017; otherwise M20TSVDATIM = M20TSVDATE MMDDYY10. format.
89	M20TDOELMT Date of Accretion Limit - 03/01/2017 (SAS Date)	Num	8		Derived SAS date field 03/01/2017 for all records. MMDDYY10. format.

FIELD	FIELD NAME/	FIELD	FIELD	VALID	Condition	
#	DESCRIPTION	Түре	LENGTH	VALUES	COMMENTS	
90	M20AGE Age (Exact Calculation)	Num	8		Derived field Calculated from M20TDOB and M20TSVDATIM	
91	M20AGECAT Age Groups (6 Categories from Calculated AGE)	Num	8	$1 = 55 \text{ to } 64 \text{ years} \\ 2 = 65 \text{ to } 69 \text{ years} \\ 3 = 70 \text{ to } 74 \text{ years} \\ 4 = 75 \text{ to } 79 \text{ years} \\ 5 = 80 \text{ to } 84 \text{ years} \\ 6 = 85 \text{ years or older} $	Derived field Obtained from M20AGE	
92	M20RACECAT Race Groups (3 Categories from CMS Race)	Num	8	1 = White 2 = Black 3 = Other	Derived field Obtained from M20RACE	
93	M20PCS Physical Component Summary Score	Num	8		Derived field Unadjusted PCS score.	
94	M20MCS Mental Component Summary Score	Num	8		Derived field Unadjusted MCS score.	
95	M20ANALYT Analytic Sample Indicator	Num	8	0 = Not included in analytic sample 1 = Included in analytic sample	Derived field	
96	<i>M20PLTYPE</i> Plan Type - source CMS 05/17	Char	39		Obtained from the May 2017 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans	
97	M20PLORGNM Plan Organization Name - source CMS 05/17	Char	50		Obtained from the May 2017 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans	
98	M20PLPTORG Plan Parent Organization Name- source CMS 05/17	Char	50		Obtained from the May 2017 CMS Monthly Enrollment by Contract Report of Medicare Advantage/Part D Health Plans	
99	M20PLANSTN Plan State - source HPMS 08/17	Char	2		Obtained from the August 2017 HPMS Plan Contract List.	
100	M20PLTAXST Plan Tax Status - source HPMS 08/17	Char	25		Obtained from the August 2017 HPMS Plan Contract List.	
101	<i>M20PLNDCT</i> 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 2017 HPMS Plan Contract List.	

FIELD	FIELD NAME/	FIELD	FIELD	Valid	COMMENTS
#	DESCRIPTION	Type	Length	Values	
102	M20PLREGCDE Plan CMS Region Code	Num	3	 1 = Region 1 - Boston (CT, ME, MA, NH, RI, VT) 2 = Region 2 - New York (NY, NJ, PR, VI) 3 = Region 3 - Philadelphia (DE, DC, 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 2017 HPMS Plan Contract List

Appendix B (Annotated Survey Form)

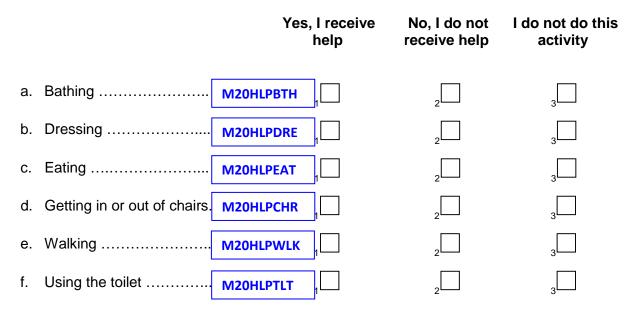
2017 Medicare Health Outcomes Survey-Modified

1.	In general, would yo	u say your health is:			M20VRGENHTH
	Excellent	Very good	Good	Fair	Poor
	1	2	3	4	5
2.	How much difficulty, as a sack of potatoes	if any, do you have lif s?	ting or carrying of	bbjects as heavy a	s 10 pounds, such M20DIFCARRY
	No difficulty at all	A little difficulty	Some difficulty	A lot of difficulty	Not able to y do it
	1	2	3	4	5
3.	How much difficulty, blocks?	if any, do you have w	alking a quarter	of a mile—that is a	about 2 or 3 M20DIFBLKS
	No difficulty at all	A little difficulty	Some difficulty	A lot of difficulty	Not able to y do it
	1	2	3	4	5
4.		or physical problem, o ecial equipment or l			following
			No, I do not have difficulty	Yes, I have difficulty	I am unable to do this activity
	a. Bathing	M20ADL	BTH 1	2	3
	b. Dressing	M20ADL	DRS 1	2	3
	c. Eating	M20ADL	EAT 1	2	3
	d. Getting in or o	ut of chairs. M20ADL	CHR ,	2	3

- M20ADLWLK e. Walking
- f. Using the toilet **M20ADLTLT**

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	1	2	3
b. Climbing several flights of stairs. M20VRMACT	1	2	3

7. During the <u>past 4 weeks</u>, 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	little of	Yes, some of the time	most of	Yes, all of the time
a. Accomplished less than you would like M20VRPACCL		2	3	4	5
b. Were limited in the kind of work or other activities M20VRPWORK	_ 	2	3	4	5

During the past 4 weeks, have you had any of the following problems with your regular daily 8. 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 le would like		1	2	3	4	5
b. Didn't do work or as carefully as u		 	2	3	4	5
During the past 4 wee work outside the home	ks , how much did j	pain interfe	ere with yo	ur normal v	vork (inclue M20VR	
Not at all	A little bit	Moderate	ely	Quite a bi	t Ex	tremely

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:

9.

	All of the time	of the	A good bit of the time	of the	A little of the time	None of the time
a. have you felt calm and peaceful? M20VRCALM	1	2	3	4	5	6
b. did you have a lot of energy ? M20VRENERGY	1	2	3	4	5	6
c. have you felt downhearted and blue ? M20VRDOWN	1	2	3	4	5	6
11. During the past 4 weeks, how much of the						

problems interfered with your social activities (like visiting with friends, relatives, etc.)?

				M20VRSACT
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 one year ago, how would you rate your physical health in general now?

		About the			M20VRPHCMP	
	Much better	Slightly better	same	Slightly worse	Much worse	
	1	2	3	4	5	
13.	Compared to one ye anxious, depressed of	—		tional problems	(such as feeling	
	Much better	Slightly better	About the same	Slightly worse	M20VRMHCMP Much worse	
	1	2	3	4	5	
14.	Do you experience m	nemory loss that int	erferes with daily ac	tivities?		
	Yes				M20MEMLOSS	
	2 No					
15.	How often, if ever, do	o you have difficulty	controlling urination	n (bladder accider	nts)?	
		Less than once	Once a week or		M20EVERURN	
	Never	a week	more often	Daily	Catheter	
	1	2	3	4	5	
16.	Who completed this	survey form?			М20СМРШНО	
	1 Medicare Par	ticipant		→STO	P HERE	
	₂ Family memb	er, relative, or frien	d of Medicare Partic	cipant →Go t	o Question 17	
	$\frac{1}{3}$ Nurse or othe	r health profession	al	→Go te	o Question 17	

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

	~~~	·/	
	1	Physical problems	M20PROXRSN1
	2	Memory loss or mental problems	M20PROXRSN2
	3	Unable to speak or read English	M20PROXRSN3
	4	Person not available	M20PROXRSN4
	5	Other	M20PROXRSN5
18.	How o	did you help complete this survey? (Please answer <b>ALL</b> that apply.)	
	1	Read the questions to the person	M20PROXHOW1
	2	Wrote down the person's answers	M20PROXHOW2
	3	Answered the questions based on my experience with the person	M20PROXHOW3
	4	Used medical records to fill out the survey	M20PROXHOW4
	5	Translated the survey questions	M20PROXHOW5
	6	Other	M20PROXHOW6

#### FOR PROFESSIONAL STAFF (CAREGIVERS) ONLY

- 19. Which of the following best describes your position? (Please choose one answer.)
  - Home Health Aide, Personal Care Attendant, or Certified Nursing Assistant
  - Nurse (RN, LPN, or NP)
    - Social Worker or Case Manager
    - Adult Foster Care/Adult Day Care/Assisted Living/Residential Care Staff
  - Interpreter
  - Other

#### YOU HAVE COMPLETED THE SURVEY. THANK YOU.

M20CAREPOS