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## Medicare Health Outcomes Survey (HOS) Glossary

| Activities of Daily Living (ADLs)                        | Activities of daily living (ADLs) are the everyday activities<br>involved in personal care such as feeding, dressing, bathing,<br>getting in or out of chairs, toileting, and walking. Physical or<br>mental disabilities can restrict a person's ability to perform<br>personal ADLs. The HOS collects information on limitations in<br>ADLs. |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Affordable Care Act                                      | See Patient Protection and Affordable Care Act (PPACA).                                                                                                                                                                                                                                                                                        |
| Analytic Sample                                          | Analytic samples are defined below for the two annual Medicare HOS reports:                                                                                                                                                                                                                                                                    |
|                                                          | <i>Baseline</i> analytic sample is limited to seniors, age 65 or older at baseline, who had a physical component summary (PCS) score or a mental component summary (MCS) score and a valid reporting unit (Medicare Advantage Organization).                                                                                                   |
|                                                          | <i>Performance Measurement</i> analytic sample is limited to seniors, age 65 or older at baseline, who had a PCS or MCS score at baseline, and a valid reporting unit (Medicare Advantage Organization) at follow up.                                                                                                                          |
| Behavioral Risk Factor<br>Surveillance System<br>(BRFSS) | The Behavioral Risk Factor Surveillance System (BRFSS) is a continuous, state-based, random telephone survey of community dwelling U.S. adults aged 18 and older. The BRFSS is administered and supported by the Centers for Disease Control and Prevention (CDC).                                                                             |
| Beneficiary                                              | An individual receiving benefits from the Medicare program.                                                                                                                                                                                                                                                                                    |
| Beneficiary Link Key                                     | A unique, unidentifiable link key assigned by CMS that replaces<br>the HIC Number when linking beneficiaries across CMS data<br>files.                                                                                                                                                                                                         |
| Body Mass Index (BMI)                                    | Body Mass Index (BMI) is a measure of body fat that applies to men and women, and is calculated based on height and weight. The formula is: $BMI = [weight in pounds/(height in inches)^2] x$ 703. The HOS collects information on height and weight for calculation of BMI results.                                                           |

| САРР                | Boston University School of Public Health, Health Policy &<br>Management Department, CAPP: Center for the Assessment of<br>Pharmaceutical Practices (formerly Health Outcomes Technology<br>Program [HOT]) subcontracts with the National Committee for<br>Quality Assurance for the Medicare HOS Program to support the<br>science of survey design and methodology. Analytic work<br>includes psychometric comparisons of 36 item surveys used in<br>the Medicare managed care and the Veteran's Health<br>Administration programs, comparisons of health outcomes<br>between the Medicare Advantage and VA patient populations,<br>and analysis of case mix methodology employed by the HOS. |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | Center for the Assessment of Pharmaceutical Practices<br>Health Policy & Management Department<br>Boston University School of Public Health<br>715 Albany Street (T-3W)<br>Boston, MA 02118                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Case-Mix Adjustment | A method that adjusts the resulting data for patient characteristics,<br>which are known to be related to systematic biases in the way<br>people respond to survey questions. This is accomplished using<br>linear regression techniques, and assumes that the control<br>variables (covariates) have been measured accurately and that the<br>model is correctly specified and applicable to all cases.                                                                                                                                                                                                                                                                                        |
| CDC                 | The Centers for Disease Control and Prevention (CDC) serves as<br>the national focus for developing and applying disease prevention<br>and control, environmental health, and health promotion and<br>education activities designed to improve health for people in the<br>United States.                                                                                                                                                                                                                                                                                                                                                                                                       |
| CMS                 | The Centers for Medicare & Medicaid Services (CMS) is<br>responsible for administering the Medicare, Medicaid, and Child<br>Health Insurance Programs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     | Centers for Medicare & Medicaid Services<br>7500 Security Boulevard<br>Baltimore, MD 21244                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## CMS Regions and Regional Offices

CMS has Regional Offices in ten major cities throughout the U.S., in addition to their Central Office in Baltimore. Each Regional Office covers a specific group of states, and, for some regions, U.S. Territories and Commonwealths, which are listed below. Additional information is provided on the Regional Office section at <u>www.CMS.gov</u>.

| Region    | Regional     | States                                      |
|-----------|--------------|---------------------------------------------|
|           | Office       |                                             |
| Region 1  | Boston       | CT, ME, MA, NH, RI, VT                      |
| Region 2  | New York     | NY, NJ, the Territory of the Virgin Islands |
|           |              | (VI), and the Commonwealth of Puerto Rico   |
|           |              | (PR)                                        |
| Region 3  | Philadelphia | DE, MD, PA, VA, WV, DC                      |
| Region 4  | Atlanta      | AL, NC, SC, FL, GA, KY, MS,TN               |
| Region 5  | Chicago      | IL, IN, MI, MN, OH, WI                      |
| Region 6  | Dallas       | AR, LA, NM, OK, TX                          |
| Region 7  | Kansas City  | IA, KS, MO, NE                              |
| Region 8  | Denver       | CO, MT, ND, SD, UT, WY                      |
| Region 9  | San          | AZ, CA, HI, NV, the Territories of American |
| -         | Francisco    | Samoa (AS), and Guam (GU), and the          |
|           |              | Commonwealth of the Northern Mariana        |
|           |              | Islands (MP)                                |
| Region 10 | Seattle      | AK, ID, OR, WA                              |

Cohort

A cohort is a group of people who share a common designation, experience, or condition (e.g., Medicare beneficiaries). For the HOS, a cohort refers to a random sample of Medicare beneficiaries that is drawn from each Medicare Advantage Organization (MAO) with a minimum of 500 enrollees and surveyed every spring (i.e., a baseline survey is administered to a new cohort each year). Two years later, these same respondents are surveyed again (i.e., follow up measurement). For data collection years 1998-2006, the MAO sample size was one thousand. Effective 2007, MAO sample is increased to twelve hundred.

CPM The National Committee for Quality Assurance's (NCQA) Committee on Performance Measurement (CPM) oversees the development of the HEDIS<sup>®</sup> measurement set. The CPM is a broad-based group representing employers, consumers, health plans and others that decide on the content of HEDIS. The CPM determines which measures are included and field tests determine how the items are measured.

| Data Evaluation                             | The process by which discrepancies within the data are identified<br>and resolved, including issues related to file structure, record<br>numbers, range, and consistency. Health Services Advisory<br>Group (HSAG) conducts data evaluation for all HOS cohorts.                                                                                                                                                                               |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data User's Guide (DUG)                     | A Data User's Guides (DUG) is distributed with each MAO's Medicare HOS Performance Measurement data set and with each PACE Organization's Medicare HOS-M data set to provide detailed documentation regarding beneficiary-level file construction and contents.                                                                                                                                                                                |
| Depression Screen                           | Beginning with the 2013 HOS 2.5, two new questions about depression were added to the HOS. A Medicare beneficiary is considered to have a positive depression screen when he or she scores 3 points or greater on the combined total points of the two depression questions, for which each is scored on a scale of 0-3:                                                                                                                       |
|                                             | <ul><li>Little interest or pleasure in doing things over past two weeks</li><li>Feeling down, depressed or hopeless over past two weeks</li></ul>                                                                                                                                                                                                                                                                                              |
|                                             | For the years 2009-2012, four questions were used to determine a positive depression screen, and three of the four questions were used for the years 1998-2008 (see earlier questionnaires on the Survey Instrument section at <u>www.HOSonline.org</u> ). A participant in the Medicare 1998-2012 HOS was considered to have a positive depression screen when he or she answered "yes" to <i>any</i> of the applicable depression questions. |
| Disenrollment                               | Beneficiaries who respond at baseline and are no longer in their original MAO at follow up are considered disenrolled. There are two types of disenrollment defined below:                                                                                                                                                                                                                                                                     |
|                                             | <i>Involuntary</i> : The beneficiary's MAO is no longer a part of the HOS as of the follow up remeasurement.                                                                                                                                                                                                                                                                                                                                   |
|                                             | <i>Voluntary</i> : The beneficiary's MAO continues in the HOS; however, the beneficiary is no longer enrolled in the MAO as of the follow up remeasurement.                                                                                                                                                                                                                                                                                    |
| Electronic Telephone<br>Interviewing System | Survey vendors use a standardized version of electronic telephone<br>interviewing system specifications to collect telephone interview<br>data from a sampled member or a proxy. Survey vendors attempt<br>telephone follow up in English or Spanish when members fail to<br>respond after a second mail survey or return an incomplete mail<br>survey.                                                                                        |

| Eligible HOS Sample                               | Eligible samples are defined below for the two annual Medicare HOS reports:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                   | <i>Baseline</i> eligible sample includes those beneficiaries who were<br>randomly selected from their MAO, were seniors (age 65 or<br>older) or disabled (less than age 65), and did not have an<br>ineligible HOS survey. For data collection years 1998-2008, a<br>member was required to be continuously enrolled in their MAO<br>for a six month period. Effective 2009, this requirement is<br>waived. For data collection years 1998-2009, beneficiaries with<br>End Stage Renal Disease (ESRD) were excluded. Effective<br>2010, those with ESRD are no longer excluded. |
|                                                   | <i>Performance Measurement</i> eligible sample is limited to those<br>seniors (age 65 or older at baseline) who had a baseline PCS or<br>MCS score, were alive at follow up, and were still enrolled in<br>their original MAO at the time of the follow up.                                                                                                                                                                                                                                                                                                                     |
| Eligible HOS-M Sample                             | Beginning in 2010, the eligible sample for the Medicare HOS-M report includes those beneficiaries in PACE Organizations who were randomly selected from their HOS-M plan, were seniors and disabled members (55 and older), and did not have an ineligible HOS-M survey. For the data collection years 2005-2009, seniors and disabled members from Dual-Eligible Demonstration Projects in Massachusetts, Minnesota, and Wisconsin were also included.                                                                                                                         |
| Employer Group/Union<br>Direct-Only PFFS Contract | An MAO under contract with an employer, labor organization, or<br>the trustees of a fund established by one or more of these entities to<br>furnish health benefits to current or former employees of the<br>employer group or to current or former members of the labor<br>organization.                                                                                                                                                                                                                                                                                       |
| ESRD                                              | End Stage Renal Disease (ESRD) is characterized by permanent<br>kidney failure that is treated with dialysis or a transplant. Since<br>2010, those with ESRD are included in the HOS baseline<br>sampling. Beginning in 2012, the follow up sampling may also<br>include members with ESRD if they responded at baseline, are<br>alive at follow up, and remain in the same MAO at follow up.                                                                                                                                                                                   |
| Fall Risk Management<br>(FRM)                     | Fall Risk Management (FRM) is an NCQA HEDIS <sup>®</sup> measure that<br>is comprised of four HOS questions, which collect information on<br>a beneficiary's history of falls or problems with balance or<br>walking, a discussion of falls with a medical provider, and a<br>provider's management of fall risk. Two rates are calculated: the<br>Discussing Fall Risk rate and the Managing Fall Risk rate; the<br>latter is used for the <i>Reducing the Risk of Falling</i> measure<br>reported by CMS for the Medicare Star Ratings.                                       |

| FIDE SNP              | Beginning in 2012, a Fully Integrated Dual-Eligible Special<br>Needs Plan (FIDE SNP) is a plan benefit package within an MAO<br>that integrates Medicare, Medicaid, and supplemental benefits<br>within a single plan to eligible beneficiaries. A FIDE SNP must<br>have a capitated contract with a State Medicaid Agency for<br>primary, acute, and long-term care. Starting in 2011, prospective<br>FIDE SNPs may elect to report HOS to determine if they are<br>eligible for frailty adjustment payment under the Patient<br>Protection and Affordable Care Act of 2010, similar to payment<br>provided to PACE programs. See Special Needs Plan (SNP) and<br>Plan Benefit Package (PBP).                                                                                                       |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HEDIS <sup>®</sup>    | The Healthcare Effectiveness Data and Information Set $(\text{HEDIS}^{\circledast})$ is the most widely used set of performance measures in the managed care industry, and is developed and maintained by NCQA. The Medicare HOS is a HEDIS Effectiveness of Care measure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Healthy Days Measures | The HOS instrument incorporates three Healthy Days questions<br>from the CDC's BRFSS. Two items ask beneficiaries about their<br>physical and mental health during the previous thirty days, and<br>one item asks how their poor physical or mental health limited<br>them from doing their usual activities, such as self-care, work, or<br>recreation. For additional information regarding the Healthy Days<br>Measures and findings, please visit the CDC Health-Related<br>Quality of Life (HRQOL) website at www.cdc.gov/hrqol.<br>Comparative national and state-level Healthy Days Measures<br>data, including demographic breakdowns by age, sex, or<br>race/ethnicity groups within each state, can be found at<br>http://apps.nccd.cdc.gov/HRQOL (the CDC HRQOL Prevalence<br>Data page). |
| HIC Number (HIC #)    | The Health Insurance Claim Number ([HIC] usually the Medicare number) is the beneficiary level unit of analysis for the HOS reports.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| HOS Measure           | The HOS measure assesses an MAO's ability to maintain or<br>improve the physical and mental health functioning of its<br>Medicare members over time. See Medicare Health Outcomes<br>Survey (HOS).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| HOS Website and<br>Technical Support | The CMS HOS website at <u>www.CMS.gov/Research-Statistics-Data-and-Systems/Research/HOS/index.html</u> provides general information about the HOS program. A full description of the program may be found at <u>www.HOSonline.org</u> . The Medicare HOS Information and Technical Support Telephone Line (1-888-880-0077), and E-mail Address ( <u>hos@HCQIS.org</u> ) are available to provide technical assistance for questions about HOS reports and data.                                                                                 |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HPMS                                 | The Health Plan Management System (HPMS) is the CMS data collection and maintenance system that houses MAO-related information, including summary level HOS results.                                                                                                                                                                                                                                                                                                                                                                            |
| HRQOL                                | The concept of Health-Related Quality of Life (HRQOL) refers to<br>a person or group's perceived physical and mental health over<br>time. HRQOL is used to measure the effects of chronic illness to<br>better understand how an illness interferes with a person's day-to-<br>day life, and to measure the effects of numerous disorders,<br>disabilities, and diseases in different populations. Tracking<br>HRQOL can identify subgroups with poor physical or mental<br>health and guide policies or interventions to improve their health. |
| HSAG                                 | Health Services Advisory Group (HSAG) contracts with CMS to<br>provide HOS data evaluation and analysis, develop and<br>disseminate data files and reports, educate data users and<br>stakeholders on HOS findings and applications, and conduct<br>applied research with HOS data to support CMS priorities.                                                                                                                                                                                                                                   |
|                                      | Health Services Advisory Group<br>3133 East Camelback Road, Suite 300<br>Phoenix, AZ 85016                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ineligible HOS Survey                | Ineligible surveys are defined below for the Medicare HOS baseline and follow up cohorts:                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                      | <i>Baseline</i> ineligible survey meets one of the following criteria:<br>the beneficiary is deceased, not enrolled in the MAO, has an<br>incorrect address and phone number, has a language barrier or<br>is removed from the sample.                                                                                                                                                                                                                                                                                                          |
|                                      | <i>Follow Up</i> ineligible survey meets one of the following criteria: no longer enrolled in the MAO, has an incorrect address and phone number, or has a language barrier.                                                                                                                                                                                                                                                                                                                                                                    |

|                                                                | health plan; has an incorrect address and phone number; has a<br>language barrier; or is removed from the sample due to death,<br>institutionalization, or disenrollment after the sample is drawn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Instrumental Activities of<br>Daily Living (IADLs)             | Instrumental Activities of Daily Living (IADLs) are activities that<br>are often performed by a person who is living independently in a<br>community setting during the course of a normal day, such as<br>managing money, shopping, telephone use, travel in the<br>community, housekeeping, preparing meals, and taking<br>medications correctly. IADLs measure a person's ability to live<br>independently.                                                                                                                                                                                                                                                                                                                                                               |
| Likert Scale                                                   | An ordinal scale of responses to a question in an ordered sequence, such as from "(1) strongly disagree" through "(2) no opinion" to "(3) strongly agree." Rensis Likert, a social psychologist, developed an empirical method for assigning numerical scores to this type of scale.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Management of Urinary<br>Incontinence in Older<br>Adults (MUI) | Management of Urinary Incontinence in Older Adults (MUI) is<br>an NCQA HEDIS <sup>®</sup> measure that is comprised of four HOS<br>questions to gather data on UI experiences, UI problems,<br>patient/provider discussion of UI, and receipt of UI treatment.<br>Urinary incontinence is the involuntary leakage of urine. Two<br>rates are calculated: the Discussing Urinary Incontinence rate and<br>the Receiving Urinary Incontinence Treatment rate; the latter is<br>used for the <i>Improving Bladder Control</i> measure reported by<br>CMS for the Medicare Star Ratings. Note: The MUI measure is<br>undergoing revision. It will not be collected from the 2014 or<br>2015 HOS surveys, and will not be reported for the 2016 or 2017<br>Medicare Star Ratings. |
| Medical Outcomes Study<br>36-Item Health Survey<br>(MOS SF-36) | The Medical Outcomes Study 36-Item Health Survey (MOS SF-<br>36) is a generic, multi-purpose health survey with 36 questions.<br>The 36-item survey is used to compute physical component<br>summary (PCS) and mental component summary (MCS) Scores.<br>See Medicare HOS Version 1.0 (HOS 1.0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Medical Savings Account<br>(MSA) Plan                          | An MSA plan combines a high-deductible health plan with a<br>medical savings account. Enrollees of Medicare MSA plans can<br>initially use their savings account to help pay for health care, and<br>then will have coverage through a high-deductible insurance plan<br>once they reach their deductible. Medicare MSA plans provide<br>Medicare beneficiaries with more control over health care<br>utilization, while still providing coverage against catastrophic<br>health expenses                                                                                                                                                                                                                                                                                    |

Ineligible surveys for the Medicare HOS-M meet one of the following criteria: the beneficiary is deceased; not enrolled in the

Ineligible HOS-M Survey

| Medicare                                         | CMS administers Medicare, the nation's largest health insurance<br>program, which covers over 50 million Americans. Medicare is a<br>Health Insurance Program for people age 65 or older, people<br>under 65 with certain disabilities, and people with ESRD.<br>Coverage is provided through the Original Medicare Plan<br>(sometimes referred to as "fee-for-service") or through a private<br>Medicare Advantage health plan. Visit <u>www.Medicare.gov</u> for<br>additional information about the Medicare Program.                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Medicare Advantage<br>Organization (MAO)         | A Medicare Advantage Organization (MAO) is an organization<br>participating in Medicare Part C and may be a coordinated care<br>plan including plans offered by health maintenance organizations<br>(HMOs), provider-sponsored organizations (PSOs), regional or<br>local preferred provider organizations (PPOs), private fee-for-<br>service (PFFS) plans including Employer Group/Union Direct-<br>Only PFFS plans, or medical savings account (MSA) plans. A<br>Special Needs Plan (SNP) includes any type of coordinated care<br>plan that meets the CMS SNP requirements and either exclusively<br>enrolls special needs individuals as defined in Section 422.2 of<br>the Code of Federal Regulations (CFR); or enrolls a greater<br>proportion of special needs individuals than occur nationally in<br>the Medicare population as defined by CMS. Most MAOs include<br>Medicare prescription drug coverage (Medicare Part D). |
| Medicare Current<br>Beneficiary Survey<br>(MCBS) | The MCBS is a continuous, multipurpose survey of a representative national sample of the Medicare population, conducted by CMS. The central goals of MCBS are to determine expenditures and sources of payment for all services used by Medicare beneficiaries; to ascertain all types of health insurance coverage and relate coverage to sources of payment; and to trace processes over time and the impacts of program changes, satisfaction with care, and usual source of care.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Medicare Fee-For-Service                         | The Original Medicare Plan is a "fee-for-service" plan. A Medicare beneficiary is usually charged a fee for each health care service or supply that is provided. Original Medicare has two parts: Part A (Hospital Insurance) and Part B (Supplementary Medical Insurance).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Medicare Health Outcomes<br>Survey (HOS)       | The Medicare Health Outcomes Survey (HOS) is the first<br>national health outcomes measure for the Medicare population in<br>managed care settings. Collected since 1998, the Medicare HOS<br>is the only patient-reported outcomes measure in Medicare<br>managed care, and therefore remains a critical part of assessing<br>MAO quality. The Medicare HOS assesses an MAO's ability to<br>maintain or improve the physical and mental health functioning<br>of its Medicare members over time. The survey is administered to<br>a random sample of members from each MAO at the beginning<br>and end of a two-year period. The HOS results are used to<br>provide external performance measurement, to target quality<br>improvement activities, to monitor the health of the general<br>population, and to evaluate treatment outcomes and procedures.                                                                                                      |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Medicare HOS Baseline<br>Report                | The <i>Baseline</i> Report is part of a larger effort by CMS to improve<br>the health care industry's capacity to sustain and improve health<br>status and functioning within the Medicare population. The report<br>contains information on baseline measures of physical and mental<br>health, chronic medical conditions, functional status (i.e., ADLs),<br>HEDIS <sup>®</sup> measures, clinical measures, and other health status<br>indicators. The <i>Baseline</i> Report is produced and made available<br>through the Health Plan Management System (see HPMS) to all<br>participating MAOs and QIOs one year after each baseline cohort<br>data collection is completed. Downloads of the report include<br>summary level data in a Comma Separated Value (CSV) file that<br>can be opened in Excel and contains contract-level survey<br>responses and demographic data (see Medicare HOS Summary<br>Level Data).                                   |
| Medicare HOS Performance<br>Measurement Report | The <i>Performance Measurement</i> Report results reflect an MAO's ability to maintain or improve the physical and mental health functioning of its Medicare beneficiaries over a two-year period of time. The performance measurement results provide measures of change in physical and mental health over time for a representative sample of beneficiaries in an MAO. Additionally, baseline and follow up information is provided for chronic medical conditions, functional status (i.e. ADLs), clinical measures, and other health status indicators. The <i>Performance Measurement</i> Report is produced and made available through the HPMS to all participating MAOs and QIOs one year after the collection of follow up data on each cohort. Downloads of the report include summary level data in a CSV file that can be opened in Excel and contains contract-level survey responses and demographic data (See Medicare HOS Summary Level Data). |

| Medicare HOS Performance<br>Measurement Beneficiary<br>Level Data | The Medicare HOS Performance Measurement Beneficiary Level Data are distributed each fall to MAOs who request their data (hos@HCQIS.org). The new cohort data are made available one year after collection of the follow up component of a cohort. The data are provided in a CSV file and contain beneficiary identifying information (e.g., SSN and HIC numbers), and beneficiary level data for the baseline and follow up survey responses, demographic information, and calculated fields (e.g., PCS and MCS scores, BMI, and a depression screen). Detailed documentation regarding file construction and contents are distributed with all data sets in the accompanying Data User's Guide (DUG).    |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Medicare HOS Summary<br>Level Data                                | Beginning in 2013, each MAO's Medicare HOS Summary Level Data from their <i>Baseline</i> and <i>Performance Measurement</i> Reports are included with each PDF report in a ZIP file that can be downloaded from the HPMS. The data summarize the responses to the survey questions, also found in Appendix 2 of the Reports, as well as demographic information, PCS and MCS scores, BMI, and a depression screen. In 2014, the results of measures reported for the Medicare Star Ratings were added to the CSV files: three HEDIS Effectiveness of Care measures are included with the <i>Baseline</i> data and two functional health measures are included with the <i>Performance Measurement</i> data. |
| Medicare HOS Version 1.0<br>(HOS 1.0)                             | The Medicare HOS questionnaire consists of four components: physical and mental health status questions; HEDIS <sup>®</sup> Effectiveness of Care measures for management of urinary incontinence and physical activity, questions for case-mix and risk adjustment purposes; and additional health questions. The original Medicare HOS Version 1.0 (HOS 1.0) was used for data collection years 1998-2005 and included a generic 36-item health status measure as the core physical and mental health outcomes measures. See Medical Outcomes Study 36-Item Health Survey (MOS SF-36).                                                                                                                    |

Medicare HOS Version 2.0 (HOS 2.0)

Medicare HOS Version 2.5 (HOS 2.5)

Medicare Health Outcomes Survey-Modified (HOS-M) Implemented in 2006, the Medicare HOS Version 2.0 (HOS 2.0) reduced the core physical and mental health outcomes measures from 36 items to 12 items. See Veterans RAND 12-Item Health survey (VR-12). Conversion formulas have been developed and validated for the 36-item measure and the 12-item measure that will allow comparison of HOS 1.0 and HOS 2.0 results. Additional changes to the original HOS measure include the removal of redundant or less useful items, the addition of HEDIS<sup>®</sup> Effectiveness of Care measures for osteoporosis testing and fall risk management, and height and weight questions for calculation of BMI.

Implemented in 2013, the Medicare HOS Version 2.5 (HOS 2.5) uses the VR-12 as the core physical and mental health outcomes measures and the four HEDIS Effectiveness of Care measures are the *Osteoporosis Testing in Older Women, Physical Activity in Older Adults, Management of Urinary Incontinence in Older Adults, and Fall Risk Management* measures. Changes in the HOS 2.5 compared to the HOS 2.0 include the following: as part of Section 4302 of the Affordable Care Act (see Patient Protection and Affordable Care Act), existing questions on race, ethnicity, sex and disability were revised; and new questions on disability and primary language were added. New questions also include IADLs (see Instrumental Activities of Daily Living) and a new rating of pain level. Two questions about vision and hearing and four questions previously used for a depression screen have been replaced with new questions.

The Medicare Health Outcomes Survey-Modified (HOS-M) is an abbreviated version of the Medicare Health Outcomes Survey (HOS). The HOS-M focuses on frail and elderly beneficiaries, and provides a summary of their demographic information, physical and mental health status, and selected health symptoms. The instrument contains 6 Activity of Daily Living (ADL) items as the core items used to calculate a frailty adjustment factor for payment purposes. Among other questions, the survey also includes 12 physical and mental health status questions, one question about memory loss interfering with daily activities, one question about urinary incontinence, and three questions related to proxy respondents. Medicare HOS-M Beneficiary Level Data Beneficiary Level Data Beneficiary Level Data Beneficiary level data from the HOS-M Report are distributed each summer to PACE Organizations who request their data (hos@HCQIS.org). Data are made available one year after data collection. The data are provided in a CSV file and contain the survey responses, as well as calculated fields; e.g., PCS and MCS scores. Detailed documentation regarding file construction and contents are distributed with all data sets in the accompanying Data User's Guide (DUG).

Medicare Star Ratings The Medicare Star Ratings, formerly referred to as the Plan Ratings, was developed by CMS to rate the relative quality of service of MAOs based on a five-star rating scale and to reward high performing plans. Up to 48 unique quality measures, including five from the HOS, are included in the 2014 Medicare Star Ratings, which are displayed in the Medicare Plan Finder (MPF) tool on www.Medicare.gov.

Three NCQA HEDIS<sup>®</sup> Effective of Care rates, reported for MAOs in the HOS baseline reports and on HPMS, are utilized for the following Medicare Star Ratings measures:

- HEDIS Managing Fall Risk rate (*Reducing the Risk of Falls* measure)
- HEDIS Receiving Urinary Incontinence Treatment rate (*Improving Bladder Control* measure)
- HEDIS Advising Physical Activity rate (*Monitoring Physical Activity* measure)

Two percentages that are reported in the HOS performance measurement reports and on HPMS are utilized for the following Medicare Star Ratings measures:

- Physical Health Percent Better or Same (*Improving or Maintaining Physical Health* measure)
- Mental Health Percent Better or Same (*Improving or Maintaining Mental Health* measure)

Additional information about the HOS measures and other measures used in the Medicare Star Ratings is available from the CMS website at <u>www.CMS.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html</u>.

| Mental Component<br>Summary (MCS) Score     | The Mental Component Summary (MCS) score is derived from<br>the core outcome measure included in the HOS, and is a reliable<br>and valid measure of mental health. For the MCS, very high<br>scores (scale 0-100) indicate frequent positive affect, absence of<br>psychological distress, and no limitations in usual social and role<br>activities due to emotional problems. In rare instances a negative<br>score may be calculated due to the MRE method used for missing<br>data imputation.                                                                                                                                                                                                                                  |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Modified Regression<br>Estimate (MRE)       | The Modified Regression Estimate (MRE) is a method in which<br>surveys with missing data can be scored through an imputation<br>process. The PCS and MCS scores are calculated from the VR-<br>12, using the MRE for scoring and imputation of missing data.<br>When a beneficiary has missing data across the VR-12 items,<br>PCS and MCS scores are imputed using the MRE. With the use<br>of the MRE algorithm, PCS and MCS scores can be computed in<br>as many as 90% of the cases in which one or more VR-12<br>responses are missing. Depending on the pattern of missing item<br>responses for a beneficiary, a different set of regression weights is<br>required to compute that individual's PCS and/or MCS scores.      |
| NCQA                                        | The National Committee for Quality Assurance (NCQA) contracts with CMS to implement the HEDIS <sup>®</sup> Medicare HOS, which includes managing the data collection and transmittal of the HOS, supporting the development and standardization of the HOS measure, annually certifying and evaluating HOS survey vendors, and conducting ongoing quality assurance of the survey process.                                                                                                                                                                                                                                                                                                                                          |
|                                             | National Committee for Quality Assurance<br>1100 13th Street, NW, Suite 1000<br>Washington, DC 20005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Osteoporosis Testing in<br>Older Women (OTO | Osteoporosis Testing in Older Women (OTO) is an NCQA HEDIS <sup>®</sup> measure collected from one HOS question that assesses the percentage of women aged 65 and over who report ever having received a bone density test to check for osteoporosis. Osteoporosis is characterized by low bone mass and deterioration of bone strength, which lead to an increased risk of fractures. The <i>Osteoporosis Testing</i> measure was used by CMS as part of the Medicare Star Ratings from 2009–2011. The <i>Osteoporosis Testing</i> measure has been moved to the display measures at www.CMS.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html, beginning with the 2012 Medicare Star Ratings. |

| Outcome                                                  | The Medicare HOS defines outcome as a change in health status<br>over time, which is characterized in terms of the direction and<br>magnitude for a given respondent. The three major Medicare<br>HOS outcomes are death, change in physical health, and change<br>in mental health.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outlier(s)                                               | For the <i>Performance Measurement</i> analysis, MAOs displaying characteristics that are significantly different from the HOS national average in terms of physical or mental health are identified as outliers. Based on the results, an MAO that is designated as "worse than expected" for a measure is a negative outlier and an MAO designated as "better than expected" is a positive outlier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Patient Protection and<br>Affordable Care Act<br>(PPACA) | The Patient Protection and Affordable Care Act (PPACA) is a U.S. federal statute signed into law on March 23, 2010. The law, along with the Health Care and Education Reconciliation Act of 2010, is the principal health care reform legislation of the 111 <sup>th</sup> United States Congress. The PPACA reforms certain aspects of the private health insurance industry and public health insurance programs, increases insurance coverage of pre-existing conditions, expands access to insurance to over 30 million Americans, and increases projected national medical spending while lowering projected Medicare spending. In 2011, the U.S. Department of Health and Human Services (HHS) published final standards for data collection on race, ethnicity, sex, primary language and disability status, as required by Section 4302 of the PPACA. The law requires that data collection standards for these measures be used, to the extent practicable, in all national population health surveys sponsored by HHS and applies to self-reported information only. |
| Performance Measurement<br>Results                       | The adjusted differences between the HOS baseline and two-year follow up scores, which are presented as better, same, or worse than expected for PCS and MCS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Physical Activity in<br>Older Adults (PAO) | Physical Activity in Older Adults (PAO) is an NCQA HEDIS <sup>®</sup> measure that is comprised of two HOS questions to gather data on a patient's discussion and the management of physical activity with a doctor or other health provider. Regular leisure time physical activity includes light to moderate activity that causes only light sweating or slight or moderate increases in breathing or heart rate (i.e., activity at least 5 times per week for at least 30 minutes) or vigorous activity that causes heavy sweating or large increases in breathing or heart rate (i.e., activity at least 20 minutes). Two rates are calculated: the Discussing Physical Activity rate and the Advising Physical Activity rate, the latter is used for the <i>Monitoring Physical Activity</i> measure reported by CMS for the Medicare Star Ratings. |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical Component<br>Summary (PCS) Score  | The Physical Component Summary (PCS) score is derived from<br>the core outcome measure included in the HOS, and is a reliable<br>and valid measure of physical health. For the PCS, very high<br>scores (scale 0-100) indicate no physical limitations, disabilities<br>or decline in well being; high energy level; and a rating of health<br>as "excellent." In rare instances a negative score may be<br>calculated due to the MRE method used for missing data<br>imputation.                                                                                                                                                                                                                                                                                                                                                                         |
| Plan Benefit Package<br>(PBP)              | A PBP is a unique benefit package within an MAO contract that<br>provides a prescribed set of benefits to a beneficiary. PBPs may<br>vary as to the services they cover. PBPs may include MA plans<br>with Medicare Part D prescription drug coverage (MA-PD), MA<br>plans without Part D prescription drug coverage (MA-Only), and<br>MA plans with Part D prescription drug coverage only (PDP)<br>which add supplementary drug coverage for beneficiaries who<br>choose plans that lack a prescription drug benefit, such as<br>Original Medicare, some Medicare Cost Plans, some Medicare<br>PFFS Plans, and Medicare MSA Plans.                                                                                                                                                                                                                      |
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

Plan Ratings

See Medicare Star Ratings.

| Preferred Provider<br>Organization (PPO)                                | A PPO is a plan that has a network of providers that have agreed<br>to a contractually specified reimbursement for covered benefits<br>with the organization offering the plan; provides for<br>reimbursement for all covered benefits regardless of whether the<br>benefits are provided within the network of providers; and, only<br>for purposes of quality assurance requirements in Section<br>422.152(e) of the CFR, is offered by an organization that is not<br>licensed or organized under State law as an HMO. There are two<br>types of PPOs. Local PPOs are plans that serve the counties the<br>PPO chooses to include in its service area and regional PPOs are<br>plans that serve one of 26 regions established by Medicare (these<br>may be a single state or multi-state area). |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Private Fee-For-Service<br>(PFFS) Plan                                  | A PFFS plan is offered by a state licensed risk bearing entity that<br>has a yearly contract with CMS to provide beneficiaries with all<br>their Medicare benefits plus any additional benefits the company<br>decides to provide. Beneficiaries who enroll in a PFFS MAO are<br>not required to use a network of providers. Beneficiaries can see<br>any provider who is eligible to receive payment from Medicare<br>and agrees to accept payment from the PFFS MAO.                                                                                                                                                                                                                                                                                                                             |
| Program of All-Inclusive<br>Care for the Elderly<br>(PACE) Organization | A Program of All-Inclusive Care for the Elderly (PACE)<br>Organization delivers all needed medical and supportive services<br>to provide the entire continuum of care and services to seniors<br>with chronic care needs, while maintaining their independence in<br>their homes for as long as possible. Social and medical services<br>are delivered primarily in an adult day health center,<br>supplemented by in-home and referral services as needed. The<br>majority of beneficiaries are dual eligible; that is, they receive<br>both Medicare and Medicaid coverage. PACE Organizations<br>participate in the HOS using the Medicare HOS-Modified.                                                                                                                                        |
| Proxy Respondent                                                        | An individual, such as a family member, friend or caregiver, who completes a survey on behalf of the beneficiary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| QIO                                                                     | Under the direction of CMS, the Quality Improvement<br>Organization (QIO) Program consists of a national network of 53<br>QIOs, responsible for each U.S. state, territory, and the District of<br>Columbia. QIOs work with consumers and with physicians,<br>hospitals, and other caregivers to refine care delivery systems to<br>make sure patients get the right care at the right time, particularly<br>patients from underserved populations.                                                                                                                                                                                                                                                                                                                                                |

| QualityNet                                  | QualityNet Secure Portal is the interactive, secure website that<br>allows direct exchange of files between two or more<br>organizations or individuals of an organization, including QIOs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Research Data Assistance<br>Center (ResDAC) | The Research Data Assistance Center (ResDAC) at the University<br>of Minnesota is a CMS contractor that provides assistance to<br>academic, government and non-profit researchers interested in<br>using Medicare and/or Medicaid data. ResDAC is available to<br>assist in the completion and/or review of data requisition forms<br>for Medicare HOS research data files prior to their submission to<br>CMS. For additional information and assistance, refer to the<br>ResDAC website at <u>www.resdac.org</u> . ResDAC may also be<br>contacted by calling 1-888-9RESDAC (1-888-973-7322) between<br>the hours of 8am to 4:30pm CST Monday through Friday or by e-<br>mailing <u>resdac@umn.edu</u> . |
| Respondent Sample                           | Respondent samples are defined below for the two annual Medicare HOS reports:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                             | <i>Baseline</i> respondent sample, for the purpose of calculating the <i>Baseline</i> response rate, is limited to eligible beneficiaries, including seniors and disabled, who have a baseline PCS or MCS score. For the baseline analysis, however, the <i>Baseline</i> analytic sample is limited only to eligible seniors, who have a baseline PCS or MCS score.                                                                                                                                                                                                                                                                                                                                        |
|                                             | <i>Performance Measurement</i> respondent sample is limited to those seniors eligible for remeasurement who have a follow up PCS or MCS score.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Response Rate                               | Response rates are defined below for the two annual HOS reports:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                             | <i>Baseline</i> response rate is calculated based on the number of eligible beneficiaries who have a PCS or MCS score at baseline, divided by the number of eligible beneficiaries sampled (excluding ineligible surveys).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                             | <i>Performance Measurement</i> response rate is calculated based on<br>the number of eligible beneficiaries who have a PCS or MCS<br>score at follow up, divided by the number of eligible<br>beneficiaries sampled (excluding ineligible surveys).                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| RTI                          | RTI International subcontracts with NCQA on the Medicare HOS<br>Program. RTI is involved in the sample selection for each round<br>of the Medicare HOS. RTI provides survey support in the<br>administration of the HOS-M and assists with the calculation of<br>ADLs for payment adjustment. Additionally, RTI is involved in<br>research, which compares HOS results in the managed care<br>setting to those in the fee-for-service population.                                                                                   |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | RTI International<br>3040 Cornwallis Road<br>P.O. Box 12194<br>Research Triangle Park, NC 27709                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| $\mathrm{SAS}^{\circledast}$ | A software package used for data processing and statistical analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| SEER-MHOS                    | Surveillance, Epidemiology, and End Results (SEER) – Medicare<br>Health Outcomes Survey (MHOS) is a surveillance data set that<br>links data on cancer patients to patient-reported HRQOL<br>outcomes available in the HOS. Information about the SEER-<br>MHOS linked data set may be found on the National Cancer<br>Institute (NCI) SEER-MHOS Linked Database website at:<br>http://outcomes.cancer.gov/surveys/seer-mhos.                                                                                                       |
| Special Needs Plan (SNP)     | SNPs were created by Congress in the Medicare Modernization<br>Act (MMA) of 2003 as a new type of Medicare managed care<br>plan focused on certain vulnerable groups of Medicare<br>beneficiaries who require more coordinated care such as the<br>institutionalized (I-SNP), dual-eligibles (D-SNP), and<br>beneficiaries with severe or disabling chronic conditions (C-<br>SNP). These beneficiaries are sicker and frailer than most<br>beneficiaries served through the MA program, and thus are more<br>challenging to treat. |
| Survey Vendor                | An independent survey organization that is trained and certified<br>by NCQA to administer the HOS Survey.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Technical Support            | See HOS Website and Technical Support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Veterans RAND 12-Item Health Survey (VR-12) The Veterans RAND 12-Item Health Survey (VR-12) is a generic health questionnaire developed from the Veterans Health Study, and was adapted from the RAND 36-Item Health Survey and the Medical Outcomes Study. The taxonomy underlying the construction of the VR-12 scales and summary measures is comprised of a total of 14 items. Twelve items are used to compute the eight scales that aggregate one or two items each, and the PCS and MCS scores. Two items assess change in health, one focusing on physical health and one on emotional problems. See Medicare HOS Version 2.0 (HOS 2.0), Medicare HOS Version 2.5 (HOS 2.5), and Medicare HOS-M.