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**Report on comparing  
quality among Medicare  
Advantage plans and between  
Medicare Advantage and  
fee-for-service Medicare**

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ONLINE APPENDIX

# 6-A

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**Current quality  
measurement systems in  
Medicare Advantage**

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**TABLE  
6-A1**

**HEDIS® process measures calculated from administrative data only**

**Measure**

Prevention and screening	<ul style="list-style-type: none"> <li>• Breast cancer screening</li> <li>• Glaucoma screening in older adults</li> </ul>
Respiratory conditions	<ul style="list-style-type: none"> <li>• Use of spirometry testing in the assessment and diagnosis of COPD</li> <li>• Pharmacotherapy management of COPD exacerbation</li> </ul>
Musculoskeletal	<ul style="list-style-type: none"> <li>• Disease-modifying antirheumatic drug therapy for rheumatoid arthritis</li> <li>• Osteoporosis management in women who had a fracture</li> </ul>
Medication management	<ul style="list-style-type: none"> <li>• Annual monitoring for patients on persistent medications (ACEIs or ARBs, anticonvulsants, digoxin, diuretics)</li> <li>• Potentially harmful drug–disease interactions in the elderly</li> <li>• Use of high-risk medications in the elderly</li> </ul>
Cardiovascular conditions*	<ul style="list-style-type: none"> <li>• Persistence of beta-blocker treatment after a heart attack</li> </ul>
Behavioral health*	<ul style="list-style-type: none"> <li>• Antidepressant medication management</li> <li>• Follow-up after hospitalization for mental illness</li> <li>• Initiation and engagement of alcohol and other drug-dependence treatment</li> </ul>

Note: HEDIS® (Healthcare Effectiveness Data and Information Set), COPD (chronic obstructive pulmonary disease), ACEI (angiotensin-converting enzyme inhibitor), ARB (angiotensin receptor blocker).

\*These administrative data-only measures may not be suitable for comparisons in small geographic units, as they typically do not include sufficient population numbers or service frequency to produce statistically significant results.

Medicare currently uses three systems to measure and compare quality across Medicare Advantage (MA) plans and to track changes in quality over time:

- Healthcare Effectiveness Data and Information Set (HEDIS®)
- Consumer Assessment of Healthcare Providers and Systems (CAHPS®)
- Health Outcomes Survey (HOS)

Results for each of the above systems are collected and reported at the MA contract level. They are reported for the entire Medicare population covered under the contract, even though the contract can cover a wide geographic area and can include multiple benefit packages.

**Healthcare Effectiveness Data and Information Set**

HEDIS consists of health care process measures and intermediate outcome measures that are based on

administrative data (claims data (including pharmacy claims), encounter data, laboratory results, and electronic health records), supplemented in some cases by information obtained from individuals’ medical records. Examples of measures based solely on administrative data include screening rates for breast cancer and glaucoma, timely use of appropriate medications for certain conditions, monitoring of certain medications, and avoiding harmful drug interactions. Another type of HEDIS measure is based exclusively, or partially, on abstracting data from a sample of medical records (called a hybrid measure). Examples of such measures include the rate of blood pressure control among enrollees with hypertension and measures tracking the care processes and intermediate clinical outcomes (such as blood pressure and glucose levels) for diabetics. Measures based on medical record review are determined by using a sample of approximately 411 medical records for each reporting unit (the Medicare contract). Measures within each category are shown in Table 6-A1 through Table 6-A4, with an annotation included for some measures that may not be feasible for reporting if the reporting unit is relatively small.

**TABLE  
6-A2****HEDIS® process measures calculated with administrative data and medical record review****Measure**

Prevention and screening	<ul style="list-style-type: none"><li>• Adult body mass index assessment</li><li>• Colorectal cancer screening</li></ul>
Diabetes	<ul style="list-style-type: none"><li>• Hemoglobin A1c test</li><li>• Nephropathy screening test or evidence of nephropathy</li><li>• Eye screening for diabetic retinal disease</li><li>• LDL-C test</li></ul>
Medication management	<ul style="list-style-type: none"><li>• Medication reconciliation postdischarge (SNP-only measure in 2009)</li></ul>
Cardiovascular conditions	<ul style="list-style-type: none"><li>• Cardiovascular conditions, cholesterol management: LDL-C screening rate</li></ul>
Care for older adults	<ul style="list-style-type: none"><li>• Advance care planning (SNP-only measure in 2009)</li><li>• Medication review (SNP-only measure in 2009, ACOVE-based measure)</li><li>• Functional status assessment (SNP-only measure in 2009)</li><li>• Pain screening (SNP-only measure in 2009, ACOVE-based measure)</li></ul>

Note: HEDIS® (Healthcare Effectiveness Data and Information Set), LDL-C (low-density lipoprotein cholesterol), SNP (special needs plan), ACOVE (Assessing Care of Vulnerable Elders).

**Consumer Assessment of Healthcare Providers and Systems**

CAHPS is a survey instrument that provides information on respondents' experiences with their health plan and with their providers. There are separate CAHPS surveys for MA enrollees (MA CAHPS) and for beneficiaries enrolled in fee-for-service Medicare (FFS CAHPS). The two sets of surveys have been used, and continue to be used, to compare MA and FFS.

The MA CAHPS survey consists of questions aggregated into the following domains:

- how well doctors communicate
- getting care quickly
- getting needed care without delays
- health plan information and customer service
- overall rating of health care quality
- overall rating of health plan quality

MA CAHPS results are reported at the MA contract level rather than at the local market area level. Before MA CAHPS results are used for public reporting and MA plan

comparisons, the results are adjusted for response bias with respect to each respondent's age, education, self-reported physical and mental health status, proxy status (whether the individual had help completing the survey), and Medicare–Medicaid dual-eligibility status (Elliott et al. 2001, Elliott et al. 2009, Zaslavsky et al. 2001). Similar adjustments are made in comparing MA with FFS based on CAHPS.

Previously, the MA CAHPS reporting unit consisted of smaller geographic areas or submarkets under a contract number (referred to as “geo units,” which were developed specifically for CAHPS reporting). The current practice of reporting results at the contract level makes MA CAHPS reporting consistent with MA HEDIS and HOS results.

The FFS CAHPS survey was used from 2000 through 2004, discontinued in 2005 and 2006 due to resource constraints, and resumed in 2007. For the 2000–2004 FFS CAHPS surveys, CMS used a sample size large enough to support comparisons with MA CAHPS results at the national and state levels, with oversampling in some counties with high MA penetration, which allowed for local-level comparisons between MA and FFS in those areas (Elliott et al. 2005). According to the Commission's analysis of more recent FFS CAHPS results, it appears that the sample size of the FFS CAHPS survey, with

**TABLE  
6-A3**

**HEDIS® process measures collected through enrollee surveys**

**Measure**

Collected through CAHPS® (MA and FFS versions)

- Flu shots for older adults
- Medical assistance with smoking and tobacco use cessation
- Pneumonia vaccination status for older adults

Collected through HOS

- Fall risk management
- Management of urinary incontinence in older adults
- Osteoporosis testing in older women
- Physical activity in older adults

Note: HEDIS® (Healthcare Effectiveness Data and Information Set), CAHPS® (Consumer Assessment of Healthcare Providers and Systems), MA (Medicare Advantage), FFS (fee-for-service), HOS (Health Outcomes Survey).

the needed adjustments, continues to be large enough to support the desired comparisons. CAHPS experts we consulted suggested that sample sizes for both versions of CAHPS would need to be increased (with corresponding increases in administrative costs) to obtain sufficient statistical power to analyze smaller geographic units.

**Health Outcomes Survey**

HOS is a longitudinal survey of self-reported health status among Medicare health plan enrollees over a two-year period. For each plan in the MA program, a randomly selected sample of enrollees is surveyed in a given year and resurveyed two years later to measure changes in physical and mental health. Two-year-change scores are calculated and beneficiaries' physical and mental

health status is categorized as better, the same, or worse than expected based on a predictive model taking into account risk-adjustment factors and death. When results are reported through the HOS website ([www.hosonline.org](http://www.hosonline.org)), a plan is deemed to have better or poorer outcomes if statistically significant variation exists across MA plans in their enrollees' physical or mental health change scores, at a 95 percent confidence level, and a particular plan's results are significantly different from the MA plans' national average by a certain order of magnitude. HOS results are primarily reported to the plans but are also reported publicly at a national, aggregate level on the HOS website. HOS results are now a component of the CMS star rating system for MA plans and plan-specific reporting is available at the [www.medicare.gov](http://www.medicare.gov) website.

As is true with CAHPS, for HOS the number of beneficiaries surveyed would have to increase if results

**TABLE  
6-A4**

**HEDIS® intermediate clinical outcome measures**

**Measure**

Diabetes

- Blood pressure less than 130/80 mm Hg
- Blood pressure less than 140/90 mm Hg
- Hemoglobin A1c level greater than 9.0% (poorly controlled)
- LDL-C level less than 100 mg/dL

Cardiovascular conditions

- LDL-C level less than 100 mg/dL

Hypertension

- Blood pressure less than 140/90 mm Hg

Note: HEDIS® (Healthcare Effectiveness Data and Information Set), mm Hg (millimeters of mercury), LDL-C (low-density lipoprotein cholesterol), mg/dL (milligrams per deciliter).

were to be reported at a smaller geographic level than is currently the case (i.e., below the MA contract level).

In the 2002, 2004, and 2007 rounds of the FFS CAHPS survey, CMS included HOS questions about perceived changes in a beneficiary's physical and mental condition over the preceding two-year period. This information can be used to compare FFS and MA beneficiaries, but CMS recently discontinued the practice of asking the HOS questions in the FFS CAHPS survey because of resource constraints.

In most years, the HOS results reported on the HOS website indicate that the vast majority of plans are no different from other plans in the mental and physical health outcomes of their enrollees. Over the 10 years in which results have been reported, the highest portion of plans identified as "outliers" (results better or worse than expected) has been about 20 percent. Most recently, there have been two consecutive years of no plans being classified as outliers in physical health outcomes.

The methodology for reporting HOS results in the CMS star rating system for MA plans on the Medicare Options Compare website (at [www.medicare.gov](http://www.medicare.gov)) differs from

the methodology used to report HOS results on the HOS website ([www.hosonline.org](http://www.hosonline.org)) maintained by a CMS contractor. For Medicare Options Compare, plans receive an overall star rating for health plan quality, which is a combination of individual star ratings for different domains of quality measures, including each plan's star ratings for the HOS categories of "improving or maintaining physical health" and "improving or maintaining mental health." In contrast to the "no outliers" result reported on the HOS website for the most recent cohort of beneficiaries surveyed, the Medicare Options Compare website for the 2010 enrollment period shows that 172 plans received a 4-star rating (of 5 maximum), and 4 received a 3-star rating on the HOS physical health measure. In summary, the Medicare Options Compare website shows more distinctions among plans than the HOS website, though it is still the case that very few plans are outlier plans. In addition, the Medicare Options Compare display of the HOS results allows users to see the numerical values underlying the star rankings. For HOS, the number is the percentage of beneficiaries reporting the same or better health outcomes. These numerical results can be compared across plans if users wish to see the relative results for individual MA plans. ■

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