



# Ohio Department of Medicaid 2017 Managed Care Plan Report Card Methodology

*May 2017*



## 1. Managed Care Plan Report Card Methodology

### I. Project Overview

Health Services Advisory Group, Inc. (HSAG) is currently serving as the External Quality Review Organization (EQRO) for the State of Ohio’s Medicaid Managed Care Program through a contract with the Ohio Department of Medicaid (ODM). HSAG has been charged with developing a report card to evaluate the performance of five Ohio Medicaid managed care plans (MCPs). The report card will be targeted toward a consumer audience; therefore, it will be user friendly, easy to read, and address areas of interest for consumers. As part of the EQRO contract, HSAG will analyze 2017 Healthcare Effectiveness Data and Information Set (HEDIS<sup>®</sup>)<sup>1</sup> results, including 2017 Consumer Assessment of Healthcare Providers and Systems (CAHPS<sup>®</sup>)<sup>2</sup> data from the five Ohio Medicaid MCPs for presentation in the 2017 Ohio Medicaid MCP Report Card. The MCP Report Card analysis will help support ODM’s public reporting of MCP performance information.

### II. Data Collection

For this project, HSAG will receive the MCPs’ CAHPS member-level data files and HEDIS data from ODM. The CAHPS 5.0H Adult Medicaid Health Plan Survey and the CAHPS 5.0H Child Medicaid Health Plan Survey (with the Children with Chronic Conditions [CCC] measurement set) will be used for the adult and child populations, respectively. The CAHPS survey most recently administered in 2017 will be used. The *HEDIS 2017 Specifications for Survey Measures, Volume 3* will be used to collect and report on the CAHPS measures. The *HEDIS 2017 Technical Specifications for Health Plans, Volume 2* will be used to collect and report on the HEDIS measures.

### III. Reporting Categories

MCPs’ performance will be evaluated in five separate reporting categories, identified as important to consumers.<sup>3</sup> Each reporting category consists of a set of measures that will be evaluated together to form a category summary score. The reporting categories and descriptions of the measures they contain are:

- **Doctors’ Communication and Service:** Includes adult and child CAHPS composites and items on consumer perceptions about how well their doctors communicate, and shared decision making. This category includes overall ratings of personal doctors and specialists seen most often. In addition, this

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<sup>1</sup> HEDIS<sup>®</sup> is a registered trademark of the National Committee for Quality Assurance (NCQA).

<sup>2</sup> CAHPS<sup>®</sup> is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

<sup>3</sup> National Committee for Quality Assurance. “Ten Steps to a Successful Report Card Project, Producing Comparative Health Plan Reports for Consumers.” October 1998.

category includes a CAHPS measure related to medical assistance with smoking and tobacco use cessation.

- **Getting Care:** Includes adult and child CAHPS composites on consumer perceptions regarding the ease of obtaining needed care and how quickly they received that care. This category includes HEDIS measures that assess adults’ and children’s access to care, as well as appropriate follow-up for mental illness.
- **Keeping Kids Healthy:** Includes HEDIS measures of how often preventative services are provided (e.g., child and adolescent immunizations, well-child visits, well-care visits for adolescents, annual dental visits, and weight assessment and counseling for children/adolescents).
- **Women’s Health:** Includes HEDIS measures that assess how often women-specific services are provided (e.g., prenatal and postpartum care, breast cancer, cervical cancer, chlamydia screenings, and human papillomavirus vaccines for adolescents).
- **Living With Illness:** Includes HEDIS measures that assess how well MCPs take care of people who have chronic conditions, such as asthma, diabetes, and high blood pressure. In addition, this category includes HEDIS measures that assess medication and pharmacotherapy management for people living with depression, asthma, or chronic obstructive pulmonary disease (COPD).

#### IV. Measures Used In Analysis

ODM, in collaboration with HSAG, chose measures for the 2017 MCP Report Card based on a number of factors, such as using measures that best approximate the reporting categories that are useful to consumers; using validated, audited data that are readily available; and using nationally recognized, standardized measures of Medicaid and/or managed care data.

Table 1 lists the 49 measures, 15 CAHPS and 34 HEDIS, and their associated weights.<sup>4</sup> Weights are applied when calculating the category summary scores and the 95 percent confidence intervals to ensure that all measures contribute equally in the derivation of the final results. Please see section VI for more detail on comparing MCP performance.

**Table 1—ODM 2017 MCP Report Card Reporting Categories, Measures, and Weights**

Measures	Measure Weight
<b>Category: Doctors’ Communication and Service</b>	
Child Medicaid—How Well Doctors Communicate (CAHPS Composite)	1
Adult Medicaid—How Well Doctors Communicate (CAHPS Composite)	1
Child Medicaid—Shared Decision Making (CAHPS Composite)	1
Adult Medicaid—Shared Decision Making (CAHPS Composite)	1
Child Medicaid—Rating of Personal Doctor (CAHPS Global Rating)	1

Measures	Measure Weight
Adult Medicaid—Rating of Personal Doctor (CAHPS Global Rating)	1
Child Medicaid—Rating of Specialist Seen Most Often (CAHPS Global Rating)	1
Adult Medicaid—Rating of Specialist Seen Most Often (CAHPS Global Rating)	1
Medical Assistance With Smoking and Tobacco Use Cessation: Advising Smokers and Tobacco Users to Quit	1/3
Medical Assistance With Smoking and Tobacco Use Cessation: Discussing Cessation Medications	1/3
Medical Assistance With Smoking and Tobacco Use Cessation: Discussing Cessation Strategies	1/3
<b>Category: Getting Care</b>	
Child Medicaid—Getting Needed Care (CAHPS Composite)	1
Adult Medicaid—Getting Needed Care (CAHPS Composite)	1
Child Medicaid—Getting Care Quickly (CAHPS Composite)	1
Adult Medicaid—Getting Care Quickly (CAHPS Composite)	1
Children and Adolescents’ Access to Primary Care Practitioners: Ages 12-24 Months	1/4
Children and Adolescents’ Access to Primary Care Practitioners: Ages 25 Months-6 Years	1/4
Children and Adolescents’ Access to Primary Care Practitioners: Ages 7-11 Years	1/4
Children and Adolescents’ Access to Primary Care Practitioners: Ages 12-19 Years	1/4
Adults’ Access to Preventative/Ambulatory Health Services: Total Rate	1
Follow-Up After Hospitalization for Mental Illness: 7 Day Follow-Up	1
<b>Category: Keeping Kids Healthy</b>	
Childhood Immunization Status: Combo 2	1/3
Childhood Immunization Status: Combo 3	1/3
Childhood Immunization Status: Combo 10	1/3
Immunizations for Adolescents: Combo 1	1
Well-Child Visit in the First 15 Months of Life: 6 or More Visits	1
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	1
Adolescent Well-Care Visits	1
Annual Dental Visits: Total Rate	1
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents: BMI Percentile Documentation	1/3
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents: Counseling for Nutrition	1/3

Measures	Measure Weight
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents: Counseling for Physical Activity	1/3
<b>Category: Women's Health</b>	
Breast Cancer Screening	1
Cervical Cancer Screening	1
Chlamydia Screening in Women: Combined Rate	1
Prenatal and Postpartum Care: Timeliness of Prenatal Care	1
Prenatal and Postpartum Care: Postpartum Care	1
Frequency of Ongoing Prenatal Care: Greater Than or Equal to 81 Percent of Expected Visits	1
Immunizations for Adolescents: Human Papillomavirus Vaccine	1
<b>Category: Living With Illness</b>	
Comprehensive Diabetes Care: HbA1c Control (<8.0%)	1/4
Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)	1/4
Comprehensive Diabetes Care: Eye Exam	1/4
Comprehensive Diabetes Care: Medical Attention for Nephropathy	1/4
Controlling High Blood Pressure	1
Antidepressant Medication Management: Effective Acute Phase Treatment	1/2
Antidepressant Medication Management: Effective Continuation Phase Treatment	1/2
Pharmacotherapy Management of COPD Exacerbation: Dispensed a Systemic Corticosteroid within 14 days of the Event	1/2
Pharmacotherapy Management of COPD Exacerbation: Dispensed a Bronchodilator within 30 days of the Event	1/2
Medication Management for People with Asthma: Medication Compliance 75 Percent	1

## V. Missing Values

In general, HEDIS and CAHPS data contain three classes of missing values:

- *Not Reported (NR)*—MCPs chose not to submit data, even though it was possible for them to do so.
- *Biased Rate (BR)*—MCPs’ measure rates were determined to be materially biased in a HEDIS Compliance Audit™<sup>5</sup>
- *Small Denominator (NA)*—MCPs were unable to provide a sufficient amount of data (e.g., too few members met the eligibility criteria for a measure).

In developing scores and ratings for the reporting categories, HSAG will handle the missing rates for measures as follows:

- Rates with a *NR* designation will be assigned the minimum rate.
- Rates with a *BR* designation will be assigned the minimum rate.
- Rates with a *NA* designation will be assigned the average value.

For measures with an *NA* audit result, HSAG will use the mean of non-missing observations across all MCPs. For measures with an *NR* or *BR* audit result, HSAG will use the minimum value of the non-missing observations across all MCPs. This minimizes the disadvantage for MCPs that were willing but unable to report data and ensures that MCPs do not gain advantage from intentionally failing to report complete and accurate data. If more than half of the MCPs have an *NA*, *NR*, or *BR* for any measure, then the measure will be excluded from the analysis.

For MCPs with *NR*, *BR*, and *NA* audit results, HSAG will calculate the variance for a given measure using the imputed value if the denominator is available. Conversely, if the denominator is unavailable, HSAG will use the average variance of the non-missing observations across all MCPs. This ensures that all rates reflect some level of variability, rather than simply omitting the missing variances in subsequent calculations.

Additionally, HSAG will replace missing values where an MCP reports data for at least 50 percent of the indicators in a reporting category. If an MCP is missing more than 50 percent of the measures that comprise a reporting category, HSAG will give the MCP a designation of “Insufficient Data” for that category.

## VI. Comparing MCP Performance - MCP Report Card

HSAG will compute five summary scores for each MCP, as well as the summary mean values for the MCPs as a group. Each score is a standardized score where higher values represent more favorable

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<sup>5</sup> NCQA HEDIS Compliance Audit™ is a trademark of NCQA.

performance. Summary scores for the five reporting categories (Doctors’ Communication and Service, Getting Care, Keeping Kids Healthy, Women’s Health, and Living With Illness) will be calculated from MCP scores on selected HEDIS measures and CAHPS questions and composites.

MCP ratings for individual and summary measures will be based on the difference between the MCP’s score and the unweighted group mean. The statistical significance of each difference will be determined by computing a confidence interval (CI). A 95 percent CI will be calculated around each difference to identify MCPs that are significantly higher than or significantly lower than the mean. MCPs with differences significantly above or below zero at the 95 percent confidence level will receive the top (Above Average) and bottom (Below Average) designations, respectively. An MCP is significantly above zero if the lower limit of the CI is greater than zero, and is significantly below zero if the upper limit of the CI is below zero. MCPs that do not fall either above or below zero at the 95 percent confidence level will receive the middle designation (Average).

For a given measure and MCP k, let the difference  $d_k = \text{MCP k score} - \text{group mean}$ . The formula for calculating the 95 percent CI is:

$$95\% \text{ CI} = d_k \pm 1.96\sqrt{\text{Var}(d_k)}$$

where  $\text{Var}(d_k) = \text{Variance of } d_k$  which is estimated as  $\frac{P(P-2)}{P^2} * \frac{p_k(1-p_k)}{n_k-1} + \frac{1}{P^2} \sum_{k=1}^P \frac{p_k(1-p_k)}{n_k-1}$

- and:  $p_k = \text{MCP k score}$
- $P = \text{total number of MCPs}$
- $n_k = \text{number of members in the measure sample for MCP k}$

The CIs for CAHPS questions’ means and composites and for summary measures will be computed similarly by modifying the formula for  $\text{Var}(d_k)$  to take into account the variances of HEDIS scores and CAHPS questions and composites in each summary measure.

For individual CAHPS ratings questions, HSAG will:

- Convert each question response to a score (1, 2, 3) as described in *HEDIS Volume 3: Specifications for Survey Measures*.
- Compute the MCP mean.
- Use the MCP means to compute the group mean and the difference scores.
- Substitute  $V_j$ , the MCP k Global Variance, for  $p_k(1-p_k)/(n_k-1)$  in the variance formula.

where  $V_j = \frac{1}{n_k} \frac{\sum_{i=1}^{n_k} (x_i - \bar{x})^2}{n_k - 1}$

- and:  $x_i = \text{response of member i}$
- $\bar{x} = \text{the mean score for MCP k}$

$n_k$  = number of responses in MCP k

For CAHPS composites, HSAG will:

- Convert each individual response to a score (1, 2, 3).
- Calculate each MCP composite mean.
- Use the MCP composite means to compute the group mean and the difference scores.
- Substitute  $CV_k$ , the MCP k Composite Variance, for  $p_k(1 - p_k)/(n_k - 1)$  in the variance formula.

$$\text{where } CV_k = \frac{N}{N-1} \sum_{i=1}^N \left( \sum_{j=1}^m \frac{1}{m} \frac{(x_{ij} - \bar{x}_j)^2}{n_j} \right)$$

and:  $j = 1, \dots, m$  questions in the composite measure  
 $i = 1, \dots, n_j$  members responding to question j  
 $x_{ij}$  = response of member i to question j (1, 2, 3)  
 $\bar{x}_j$  = MCP mean for question j

$N$  = members responding to at least one question in the composite

For analysis of the HEDIS-only reporting categories (Keeping Kids Healthy, Women’s Health, and Living With Illness), HSAG will:

- Standardize each measure’s score by subtracting the group mean and dividing by the group standard deviation, to give each measure equal weight toward the category rating. If measures are not standardized, a measure with higher variability will contribute disproportionately toward the category rating.
- Sum the MCP’s standardized scores, multiplied by the respective measure weights, to get the MCP summary measure score.
- Use the scores to compute the group summary mean and the difference scores.
- For each MCP k, substitute:  $\sum_{j=1}^m \frac{w_j}{c_j^2} \frac{p_j(1 - p_j)}{n_j - 1}$  for  $p_k(1 - p_k)/(n_k - 1)$  in the variance formula.

where:  $j = 1, \dots, m$  questions in the summary measure  
 $n_j$  = number of members in the sample for measure j  
 $c_j$  = group standard deviation for measure j  
 $p_j$  = nonstandardized MCP score for measure j  
 $w_j$  = measure weight for measure j

For reporting categories that include HEDIS and CAHPS scores (Doctors’ Communication and Service and Getting Care), the variance of the summary measure is the sum of the variances of the components of the measure, multiplied by their respective measure weights. For these categories, HSAG will:

- Score each CAHPS question and composite by converting each individual response to a score (1, 2, 3).
- Compute the MCP mean for each CAHPS question, composite mean for each CAHPS composite, and the MCP mean for each HEDIS measure.
- Standardize each MCP mean (composite or HEDIS) by subtracting the mean of the MCP means and dividing by the standard deviation of the MCP means, to give each measure equal weight toward the category rating. If the measures are not standardized, a measure with higher variability will contribute disproportionately toward the category rating.
- Sum the standardized MCP scores, multiplied by their respective measure weights, to get the MCP summary measure score.
- Use these summary scores to compute the group mean and the difference scores.
- For each MCP  $k$ , substitute:  $\sum_{j=1}^{m_c} \frac{w_j}{c_j^2} V_j + \sum_{j=1}^{m_c} \frac{w_j}{c_j^2} CV_j + \sum_{j=1}^m \frac{w_j}{c_j^2} \frac{p_j(1-p_j)}{n_j-1}$  for  $p_k(1-p_k)/(n_k-1)$  in

the variance formula.

where:  $j = 1, \dots, m$  or  $m_c$  HEDIS measures or CAHPS questions and composites in the summary

$n_j$  = number of members in the sample for measure  $j$

$V_j$  = variance for global measure  $j$

$CV_j$  = composite variance for composite  $j$

$c_j$  = group standard deviation for measure  $j$

$p_j$  = nonstandardized MCP score for measure  $j$

$w_j$  = measure weight for measure  $j$

A three-level rating scale will provide consumers with an easy-to-read “picture” of quality performance across MCPs and present data in a manner that emphasizes meaningful differences between MCPs. The MCP Report Card will use stars to display results for each MCP and will display MCP performance as follows:

**Table 2—ODM MCP Report Card - Performance Ratings**

Rating	MCP Performance Compared to Statewide Average	
★★★	<b>Above Average</b>	The MCP’s performance was above average compared to all Ohio Medicaid Managed Care Plans.
★★	<b>Average</b>	The MCP’s performance was average compared to all Ohio Medicaid Managed Care Plans.
★	<b>Below Average</b>	The MCP’s performance was below average compared to all Ohio Medicaid Managed Care Plans.