State of Ohio

Ohio Department of Job and Family Services

Ohio's Covered Families and Children (CFC) Medicaid Managed Care Program

HEDIS® 2007 Results Statewide Aggregate Report

Issued November 2007

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Introduction

Health Services Advisory Group, Inc. (HSAG) is contracted with the Ohio Department of Job and Family Services (ODJFS) to serve as the external quality review organization (EQRO). One of the functions of HSAG as the EQRO for ODJFS was to produce Ohio's Covered Families and Children (CFC) Medicaid Managed Care Program Healthcare Effectiveness Data and Information Set (HEDIS®) Aggregate Report.[1-1] HSAG's role was to objectively analyze the managed care plans' (MCPs') HEDIS results and to evaluate each MCP's current performance levels relative to national Medicaid percentiles. ODJFS used audited HEDIS performance measures to meet the Balanced Budget Act of 1997 (BBA) mandatory requirement for validation of performance measures.

To evaluate performance levels, ODJFS used a process for an objective, comparative review of MCP quality-of-care outcomes and performance measures based on HEDIS. Developed and maintained by the National Committee for Quality Assurance (NCQA), HEDIS is a set of performance data broadly accepted in the managed care environment as an industry standard. As presented in Table 1-1, ODJFS selected three *Effectiveness of Care* HEDIS measures from the standard Medicaid HEDIS reporting set to evaluate performance of the MCPs.

Table 1-1—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Measures

Standard HEDIS 2007 Measures	Ohio's CFC Medicaid Managed Care Program 2007 Individual Indicators
Childhood Immunization Status	1. *Childhood Immunization Status—Combination #2* 2. *Childhood Immunization Status—Combination #3*
Adolescent Immunization Status	3. *Adolescent Immunization Status—Combination #2*
Comprehensive Diabetes Care	4. *Comprehensive Diabetes Care—HbA1c Testing* 5. *Comprehensive Diabetes Care—Poor HbA1c Control* 6. *Comprehensive Diabetes Care—Good HbA1c Control* 7. *Comprehensive Diabetes Care—Eye Exam* 8. *Comprehensive Diabetes Care—LDL-C Screening* 9. *Comprehensive Diabetes Care—LDL-C Level <100* 10. *Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy* 11. *Comprehensive Diabetes Care—Blood Pressure Level <130/80* 12. *Comprehensive Diabetes Care—Blood Pressure Level <140/90*

This report establishes performance levels for Ohio's CFC Medicaid MCPs. HSAG used national 2006 Medicaid HEDIS percentiles from NCQA for comparative analysis. In addition, HSAG established low performance levels (LPLs) and high performance levels (HPLs) for each measure. The LPL was based on the national HEDIS 2006 Medicaid 25th percentile, and the HPL was based on the 90th percentile. One exception was the *Comprehensive Diabetes Care—Poor HbA1c Control* measure, for which low rates indicated good performance. For this measure, the LPL was the 75th

[1-1] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

percentile and the HPL was the 10th percentile. This rate evaluated poor control, or the percentage of members whose HbA1c level was greater than 9.0 percent; thus, a lower rate was desirable.

A trending comparison between the 2005, 2006, and 2007 Ohio's CFC Medicaid Managed Care Program weighted averages is also presented. This comparison is presented at the end of each measure-specific section, except for the *Comprehensive Diabetes Care—Good HbA1c Control*, *Blood Pressure Level <130/80*, and *Blood Pressure Level <140/90* indicators, which were first-year measures in 2007.

In addition, Section 6 of this report ("HEDIS Audit Findings") provides a summary of the HEDIS reporting capabilities of the seven MCPs:

- AMERIGROUP Ohio, Inc. (AMERIGROUP)
- Anthem Blue Cross Blue Shield Partnership Plan, Inc. (Anthem)
- Buckeye Community Health Plan, Inc. (Buckeye)
- CareSource
- Molina Healthcare of Ohio, Inc. (Molina)
- Paramount Advantage (Paramount)
- Unison Health Plan of Ohio, Inc. (Unison)

ODJFS expects its contracted MCPs to support health care claims systems, membership and provider files, and hardware/software management tools that facilitate accurate and reliable reporting of HEDIS measures.

Weighted Average Comparisons

Figure 1-1 and Figure 1-2 present Ohio's CFC Medicaid Managed Care Program's HEDIS 2007 results for the three *Effectiveness of Care* measures, comparing the current weighted average for each measure to the national HEDIS 2006 Medicaid 50th percentile. In addition, the current weighted averages for each measure are compared to Ohio's CFC Medicaid Managed Care Program HEDIS 2006 weighted averages. Please note, in 2006, five MCPs were included in the calculation of all the weighted averages. In 2007, four MCPs were included in the *Childhood and Adolescent Immunization Status* weighted averages and seven MCPs were included in the *Comprehensive Diabetes Care* weighted averages.[1-2]

In each figure, the following information will help the reader interpret these data:

- The dark-colored bars show the difference in percentage points between this year's Ohio's CFC Medicaid Managed Care Program results and the national results, comparing the 2007 Ohio's CFC Medicaid Managed Care Program weighted average with the national HEDIS 2006 Medicaid 50th percentile.

[1-2] In 2007, ODJFS only required Anthem, Buckeye, CareSource, and Paramount to provide the *Childhood* and *Adolescent Immunization Status* rates; therefore, only these four MCPs are included in the analysis of this measure.

- The light-colored bars show the difference in percentage points between this year's Ohio results and last year's Ohio results, comparing the 2006 and 2007 Ohio's CFC Medicaid Managed Care Program HEDIS weighted averages.
- For all measures (except one), a bar to the right indicates a higher level of performance and a bar to the left indicates a lower level of performance when compared to the national Medicaid 50th percentile and 2006 weighted average. The one exception is *Comprehensive Diabetes Care—Poor HbA1c Control*. For this measure, a bar to the left (a lower rate) indicates better performance.

Performance Analysis—*Childhood* and *Adolescent Immunization Status*

Summary—Childhood and Adolescent Immunization Status

Four MCPs reported results for the *Childhood and Adolescent Immunization Status* measures. Figure 1-1 shows that Ohio's CFC Medicaid Managed Care Program's 2007 weighted averages were above the national HEDIS 2006 Medicaid 50th percentile for *Childhood Immunization Status—Combination #3* and *Adolescent Immunization Status—Combination #2*. The weighted average for *Childhood Immunization Status—Combination #2*, however, fell below the national HEDIS 2006 Medicaid 50th percentile. However, when compared with the 2006 weighted averages, all three measures demonstrated a positive gain.

Figure 1-1—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Weighted Average Comparison: *Childhood Immunization Status—Combination #2* and *Combination #3,* and *Adolescent Immunization Status—Combination #2*

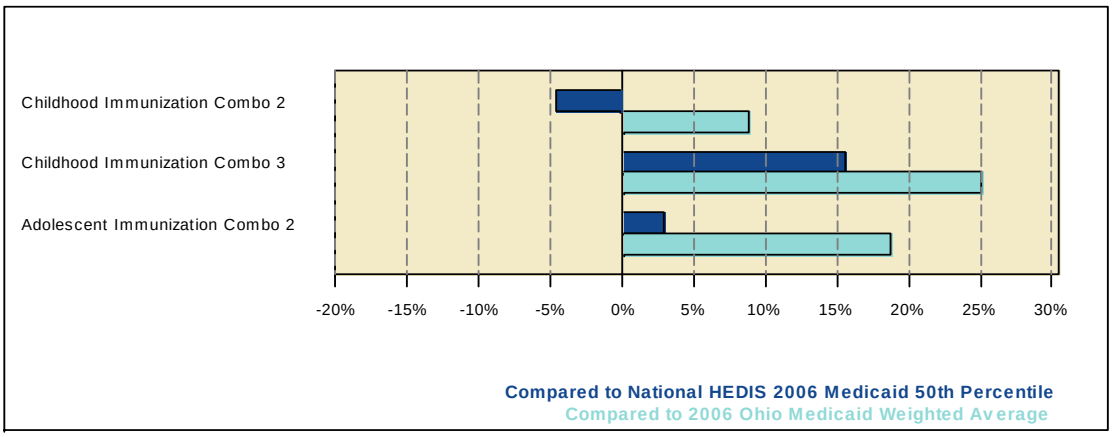


Table 1-2 shows that Anthem was the top-performing MCP among the four MCPs for the *Childhood Immunization Status—Combination #3* and *Adolescent Immunization Status—Combination #2* measures. Paramount reported the highest rate for *Childhood Immunization Status—Combination #2* (71.8 percent), followed by Anthem (71.3 percent); however, none of the MCPs outperformed the national HEDIS 2006 Medicaid 50th percentile for this measure. On the other hand, all of the MCPs exceeded the 50th percentile for the *Childhood Immunization Status—Combination #3* measure. For both children and adolescents, the MCPs relied heavily on medical record data to report the immunization rates.

Table 1-2—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Audited Rates: *Childhood Immunization Status—Combination #2* and *Combination #3,* and *Adolescent Immunization Status—Combination #2*

		Childhood Immunization Status		Adolescent Immunization Status
IDSS	MCP	Combo 2 Rate	Combo 3 Rate	Combo 2 Rate
7490	Anthem	71.3%	65.0%	58.6%
6855	Buckeye	67.6%	61.1%	29.9%
6706	CareSource	66.7%	56.0%	46.7%
7339	Paramount	71.8%	60.8%	53.3%
	2007 Ohio Medicaid Weighted Average	67.8%	57.9%	47.2%
	2006 Ohio Medicaid Weighted Average	59.0%	32.8%	28.4%
	2005 Ohio Medicaid Weighted Average	55.9%	- -	17.3%
	National HEDIS 2006 Medicaid 50th Percentile	72.4%	42.3%	44.3%

Performance Analysis—*Comprehensive Diabetes Care*

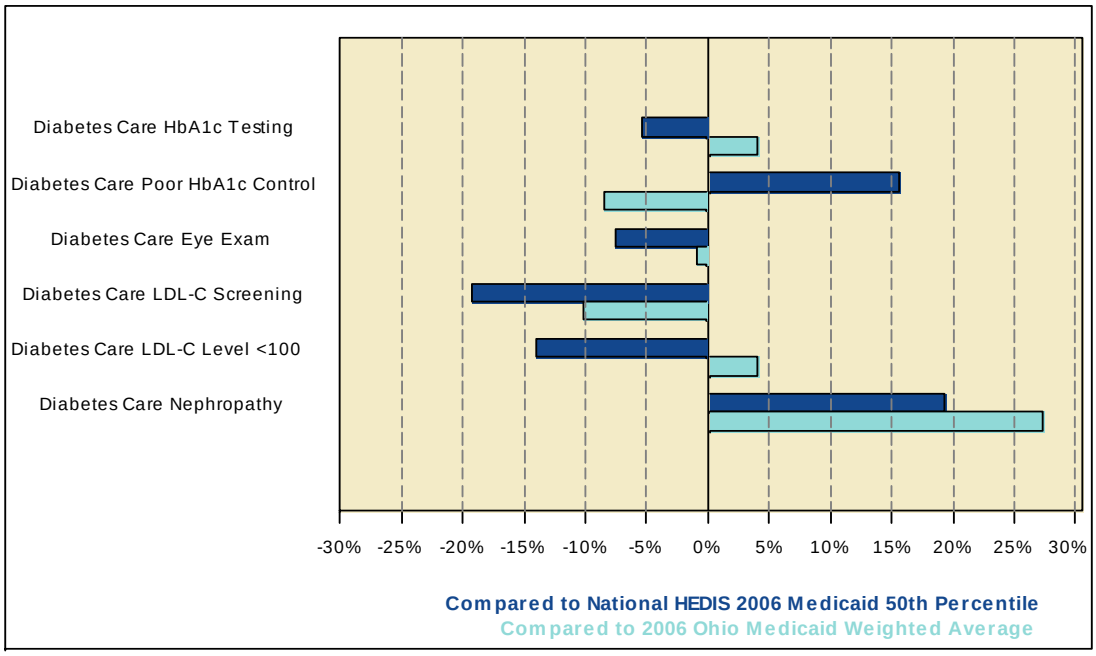
Summary—Comprehensive Diabetes Care

It should be noted that changes were made to the specifications for the *LDL-C Screening*, *LDL-C Level <100*, and *Medical Attention for Diabetic Nephropathy* indicators. Therefore, the rates for these measures are not directly comparable to previous years' rates or national benchmarks. The rates are displayed for informational purposes only. In addition, for the *Comprehensive Diabetes Care* measure, five MCPs were included in the calculation of the weighted averages in 2006, and seven MCPs were included in the calculation of the weighted averages in 2007.

All three of the comparable indicators (*HbA1c Testing*, *Poor HbA1c Control*, and *Eye Exam*) performed below the national Medicaid 50th percentile. For *Poor HbA1c Control*, a lower rate indicates better performance, so although the bar is presented to the right of the national HEDIS 2006 Medicaid 50th percentile, this indicates below average performance. Only one of the comparable measures' rates performed below the 2006 Ohio's CFC Medicaid Managed Care Program weighted averages. The low performance compared to the national 50th percentile suggests that overall improvement efforts are needed for this measure.

Since this was the first year for reporting *Comprehensive Diabetes Care—Good HbA1c Control*, *Blood Pressure Level <130/80*, and *Blood Pressure Level <140/90*, there were no national HEDIS 2006 Medicaid 50th percentiles or 2006 weighted averages for comparative purposes.

Figure 1-2—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Weighted Average Comparison: *Comprehensive Diabetes Care*



* For the *Poor HbA1c Control* indicator only, a higher rate indicates poorer care.

Table 1-3 indicates that Paramount was the top-performing MCP. Paramount performed above the 2007 Ohio's CFC Medicaid Managed Care Program's weighted average for all of the *Comprehensive Diabetes Care* indicators. When compared to the national HEDIS 2006 Medicaid 50th percentile, Paramount was the only MCP to perform better than the 50th percentile for two of the three comparable indicators: *Poor HbA1c Control* (for this measure better performance will have a rate below the 50th percentile) and *Eye Exam*.

Table 1-3—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Audited Rates for All Indicators: *Comprehensive Diabetes Care*

IDSS	MCP	HbA1c Testing Rate	Poor HbA1c Control Rate*	Eye Exam Rate
7569	AMERIGROUP	76.7%	66.7%	25.6%
7490	Anthem	72.8%	58.5%	44.6%
6855	Buckeye	61.8%	72.3%	33.8%
6706	CareSource	72.7%	61.6%	42.8%
7472	Molina	74.4%	67.4%	27.9%
7339	Paramount	76.7%	39.7%	63.6%
7479	Unison	74.3%	62.9%	50.0%
	2007 Ohio Medicaid Weighted Average	72.0%	60.8%	43.3%
	2006 Ohio Medicaid Weighted Average	67.9%	69.3%	44.3%
	2005 Ohio Medicaid Weighted Average	74.4%	58.0%	36.0%
	National HEDIS 2006 Medicaid 50th Percentile	77.4%	45.2%	50.8%

Table 1-3—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Audited Rates for All Indicators: *Comprehensive Diabetes Care*

IDSS	MCP	LDL-C Screening Rate	LDL-C Level <100 Rate	Medical Attention for Nephropathy Rate
7569	AMERIGROUP	72.2%	15.6%	65.6%
7490	Anthem	61.2%	24.1%	57.8%
6855	Buckeye	55.0%	12.9%	60.8%
6706	CareSource	65.0%	19.7%	71.5%
7472	Molina	74.4%	9.3%	65.1%
7339	Paramount	69.2%	29.2%	71.5%
7479	Unison	58.6%	22.9%	68.6%
	2007 Ohio Medicaid Weighted Average	64.0%	20.1%	68.6%
	2006 Ohio Medicaid Weighted Average	74.1%	16.1%	41.3%
	2005 Ohio Medicaid Weighted Average	74.5%	22.4%	43.8%
	National HEDIS 2006 Medicaid 50th Percentile	83.3%	34.1%	49.3%

*For the *Poor HbA1c Control* indicator only, a higher rate indicates poorer care.

It should be noted that changes were made to the specifications for the *LDL-C Screening*, *LDL-C Level <100*, and *Medical Attention for Diabetic Nephropathy* indicators. Therefore, the rates for these measures are not directly comparable to previous years' rates or national benchmarks. The rates are displayed for informational purposes only.

Table 1-3—Ohio's CFC Medicaid Managed Care Program HEDIS 2007 Audited Rates for All Indicators: *Comprehensive Diabetes Care*

IDSS	MCP	Good HbA1c Control Rate	Blood Pressure Control <130/80	Blood Pressure Control <140/90
7569	AMERIGROUP	24.4%	11.1%	34.4%
7490	Anthem	20.7%	29.9%	62.2%
6855	Buckeye	18.2%	32.1%	59.4%
6706	CareSource	19.0%	29.7%	61.1%
7472	Molina	14.0%	18.6%	48.8%
7339	Paramount	41.0%	34.1%	67.9%
7479	Unison	15.7%	21.4%	55.7%
	2007 Ohio Medicaid Weighted Average	20.9%	29.7%	60.8%

Key Findings and Recommendations

The statewide weighted averages increased significantly for the *Childhood Immunization Status* and *Adolescent Immunization Status* measures. In 2006, none of the measures' weighted averages exceeded the national HEDIS 50th percentile. In 2007, however, *Childhood Immunization Status—Combination #3* exceeded the HPL and *Adolescent Immunization Status—Combination #2* exceeded the 50th percentile. *Childhood Immunization Status—Combination #2*, however, still fell below the 50th percentile. A positive trend has been observed over the past four years for the weighted average for *Childhood Immunization Status—Combination #2*, which indicates that the four MCPs have improved outreach and/or data collection techniques.

Although there has been some improvement in the amount of data collected administratively (claims and/or encounter data) for immunizations, the MCPs' administrative data still remains relatively incomplete, resulting in heavy reliance on medical records to collect the necessary data. There could be several factors contributing to incomplete administrative data, including the fact that the MCPs may not be receiving complete immunization data for locations that are not contracted directly with the MCP. In addition, the MCPs may not be able to sufficiently supplement their administrative rate with external administrative databases.

Changes to the specifications for three of the measures (*LDL-C Screening*, *LDL-C Level <100*, and *Medical Attention for Diabetic Nephropathy*) make an evaluation of the *Comprehensive Diabetes Care* measure's performance, overall, difficult. However, an evaluation of the data collection methodology suggests that administrative data used for reporting diabetes indicators was complete, except for laboratory values necessary to report some key indicators.

To see improvement in the area of diabetes care, it is recommended that strong case management programs be implemented. In addition, barriers to care should be determined for diabetic members. By determining which areas are causing patients to not receive appropriate care, targeted best practice initiatives can be implemented in order to improve the diabetes indicators. Examples include increased patient and provider education, reminders, and clinical practice guidelines. In addition, internal registries that contain current, member-level data, such as claims/encounters and lab test results that are shared with the managing physicians are very effective.

For the *Immunization Status* and *Comprehensive Diabetes Care* measures, it is important that the MCPs seek out members who do not use traditional primary care services. One example of a nontraditional primary care service is the use of health fairs. This will require a commitment of resources to an area that is not typically targeted. The MCPs will need to identify these "silent members" and put in place quality improvement strategies that target these members. This could include sending reminders to non-numerator-compliant members and encouraging primary care providers to collect the missing data during visits. By reaching these "silent members," the MCPs will likely improve performance across all measures due to the ability to identify health care issues early, better manage health conditions, and ultimately, improve outcomes of care.

Finally, ODJFS may want to consider other HEDIS measures for comparison and reporting purposes. Measures such as *Use of Appropriate Medications for People with Asthma*, *Children and Adolescents' Access to Primary Care Practitioners*, and *Lead Screening in Children* would capture important rates relative to quality and access.

Ohio Medicaid MCP HEDIS 2007 Measures

HEDIS includes a standard set of measures that can be reported by Medicaid MCPs nationwide. ODJFS selected three HEDIS measures from the standard Medicaid set, which represented 12 distinct rates. For HEDIS 2007, ODJFS required four of the MCPs to report all 12 of these rates, and three of the MCPs to report only nine of the rates.

Audit Findings

Through the audit process, each measure reported by an MCP was assigned an NCQA-defined audit finding. Measures received one of four predefined findings: *Report*, *Not Applicable*, *Not Report*, or *No Benefit*. An audit designation of:

- *Report* indicates that the MCP complied with all HEDIS specifications to produce an unbiased, reportable rate or rates that can be released for public reporting.
- *Not Applicable* indicates that the MCP complied with all HEDIS specifications but the denominator was too small (less than 30) to report a valid rate.
- *Not Report* indicates that the MCP calculated the measure but the rate was materially biased, or the MCP chose not to report the measure.
- *No Benefit* indicates that the MCP did not offer the health benefits required by the measure.

It should be noted that NCQA allows MCPs to rotate HEDIS measures in some circumstances. The rotation schedule enables MCPs to use audited and reportable rates from the previous year. This strategy allows MCPs with higher rates for some measures to focus resources on improving rates for other measures. Only hybrid measures are eligible to be rotated, and they must meet the following criteria: (1) be on the list of eligible measures for rotation, (2) have an audited and reportable rate for the measure from the previous year, (3) the MCP must have maintained a constant reporting entity since the previous year, and (4) if a *Not Applicable* result was reported in the previous year, the *Not Applicable* status still applies.

Changes to Measures

For the 2007 HEDIS reporting year, the *Comprehensive Diabetes Care* measure had the following changes:

- *LDL-C Level <130* measure was retired.
- Three new measures were added to *Comprehensive Diabetes Care:*
  - *Good HbA1c Control*
  - *Blood Pressure Level <140/90*
  - *Blood Pressure Level <130/80*

- The use of angiotensin-converting enzyme (ACE) inhibitors and angiotensin-receptor blockers (ARBs) for numerator compliance was added for *Medical Attention for Diabetic Nephropathy*.
- The LDL-C screening and control criteria were restricted to require testing in the measurement year.

Performance Levels

Comparative information in this report is based on the national HEDIS 2006 Medicaid percentiles, which are the most recent results available from NCQA and represent rates reported for measurement year 2005. MCP rates are compared to performance levels established for this report. The purpose of identifying performance levels is to compare the quality of services provided to Ohio's CFC Medicaid Managed Care Program members and, ultimately, to improve the program average for all the measures. Two levels have been established for each measure at specific, attainable rates:

- The high performance level (HPL) represents current, high performance in national Medicaid managed care. Performing above the 90th percentile indicates the HPL.
- The low performance level (LPL) represents below-average performance nationally. Performing below the 25th percentile indicates the LPL.

According to this performance level scheme, MCPs with reported rates above the 90th percentile (HPL) rank in the top 10 percent of all Medicaid MCPs nationally. Similarly, MCPs reporting rates below the 25th percentile (LPL) rank in the bottom 25 percent nationally for that measure.

This performance level scheme is reversed for one of the measures included in this report: *Comprehensive Diabetes Care—Poor HbA1c Control*.

- For this measure only, a *lower* rate indicates better performance.
- Performing below the 10th percentile (rather than the 90th percentile) shows excellent performance and represents the HPL.
- Performing above the 75th percentile (rather than the 25th percentile) shows below-average performance and represents the LPL.

Performance Analysis

For each measure, a performance summary table shows results for all reporting MCPs. Results were calculated using a scoring algorithm based on individual MCP performance relative to the HPL, the LPL, and the national HEDIS 2006 Medicaid 50th percentile. *Not Applicable* designations are shown as "NA."

Ohio's CFC Medicaid Managed Care Program Weighted Averages

The principal measure of overall performance on a given measure is the weighted average rate. The use of a weighted average based on the MCPs' eligible population for that measure provides the most representative rate for the overall Ohio's CFC Medicaid Managed Care Program population. Weighting the rate by an MCP's eligible population size ensures that rates for an MCP with 125,000 members, for example, have a greater impact on the overall program rate than the rates for an MCP with 10,000 members. Please note, in 2006, five MCPs were included in the calculation of all the weighted averages. In 2007, four MCPs were included in the *Childhood and Adolescent Immunization Status* weighted averages and seven MCPs were included in the *Comprehensive Diabetes Care* weighted averages.

Interpreting and Using Reported Averages and Aggregate Results

The 2007 Ohio's CFC Medicaid Managed Care Program weighted averages were computed by HSAG based on the reported rates and weighted by the reported eligible population size for that measure. This is a better estimate of care for all of ODJFS' CFC Medicaid members than the MCPs' average performance.

The MCPs' 2007 aggregate results, which illustrate how much of the final rate is derived from administrative data and how much from medical record review, are not an average. The results are the sum of all numerator events divided by the sum of all the denominators across all the reporting MCPs for a given measure.

Example

For example, three MCPs in a given state reported the following for a particular measure:

MCP A used the administrative method and had 6,000 numerator events out of 10,000 members in the denominator (60 percent).

MCP B also used the administrative method and found 5,000 numerator events out of 15,000 members (33 percent).

MCP C used the hybrid method and had 8,000 numerator events (1,000 of which came from medical record abstraction) and 16,000 members in the denominator (50 percent).

There were a total of 41,000 members who qualified for inclusion in the population across the MCPs. There were 19,000 numerator events across MCPs, with 18,000 from administrative data and 1,000 from medical record abstraction.

The rates were as follows:

- The overall aggregate rate was 46 percent (or 19,000/41,000)
- The administrative aggregate rate was 44 percent (or 18,000/41,000)
- The medical review rate was 2 percent (or 1,000/41,000)

Trending Comparisons of Weighted Averages

Ohio's CFC Medicaid Managed Care Program collected and reported HEDIS results for nine of the same individual indicators from 2006 to 2007. These data allowed for the trending of results for Ohio's CFC Medicaid Managed Care Program's weighted averages and the rates for three of the MCPs (Buckeye, CareSource, and Paramount). The importance of trending the statewide weighted average is to identify whether the State as a whole performed better or worse than the previous year. The trending of results may enhance quality initiatives because results cover a period of time rather than a snapshot of performance at a given point. Trending results are presented and discussed at the end of each measure-specific section. Trends are shown graphically as indicated below:

↑ = Demonstrates that the rate has increased (>10 percent), indicating a substantial improvement in performance.

↔ = Indicates no substantial change in performance (± 10 percentage points is considered within the margin or error).

↓ = Demonstrates that the rate has decreased (>10 percent), indicating a substantial decline in performance.

Different symbols (▲▼) are used to indicate a substantial performance change for *Comprehensive Diabetes Care—Poor HbA1c Control*. A decrease in the rate indicates better performance. A "▼" indicates a substantial decline in performance, as demonstrated by an **increase** in the rate by more than 10 percent. A "▲" indicates a substantial improvement in performance, as demonstrated by a **decrease** in the rate by more than 10 percent.

However, caution should be used when comparing the weighted averages from 2006 to 2007 due to the difference in the number of plans included in each year and changes to technical specifications.

Significance Testing

In this report, differences between the 2006 and 2007 Ohio's CFC Medicaid Managed Care Program weighted averages were analyzed using a t-test to determine if changes were statistically significant. The t-test evaluates the differences between mean values of two groups relative to the variability of the distribution of the scores. The t-value generated is used to judge how likely it is that the difference is real and not the result of chance.

To determine the significance for this report, a risk level of 0.05 was selected. All comparisons between the 2006 and 2007 Ohio's CFC Medicaid Managed Care Program weighted averages reported as statistically significant in this report are significant at the 0.05 level.

Calculation Methods: Administrative vs. Hybrid

Administrative Method

The administrative method of calculating performance for a measure requires MCPs to use only administrative data to:

- Identify the population of individuals eligible to receive the relevant service. This number is the denominator.
- Identify members in the eligible population who received each of the relevant services. This number is the numerator.

Medical records cannot be used to retrieve this information, and sampling is not allowed.

The administrative method is cost-efficient, but it can produce lower rates if there is incomplete claims data submission by providers.

Hybrid Method

The hybrid method requires MCPs to:

1. Use administrative data to identify the eligible population.
2. Extract a systematic sample of no more than 411 members from the eligible population.
3. Use administrative data to identify the number of members in the denominator who received the relevant service.
4. Review the medical records for members (from the sample of 411) whose administrative data did not show evidence that the relevant service was provided in order to identify those who did, in fact, receive the service.
5. Take the sum of the numbers from Steps 3 and 4 above to determine the numerator.

Example Using Both Methods

The following example illustrates how these two methods can produce significantly different rates.

An MCP has 10,000 members who qualify for the *Childhood Immunization Status* measures.

Using the **administrative method**, the MCP finds that 4,000 of the 10,000 members had evidence from administrative data of having three Hepatitis B vaccinations. The final rate for this measure using the administrative method would, therefore, be 40 percent (4,000/10,000).

Using the **hybrid method**, the MCP randomly selects 411 eligible members and finds from administrative data that 161 of these 411 members had evidence of the required Hepatitis B vaccinations. The MCP then obtains and reviews medical records for the 250 members who did not have evidence from administrative data of all three Hepatitis B vaccinations. Of those 250 members, 54 were found to have the required number of vaccinations recorded in the medical record. The final rate for this measure using the hybrid method would, therefore, be 52 percent ([161 + 54] /411).

Interpreting Results

As expected, HEDIS results can differ to a greater or lesser extent among MCPs and even across measures for the same MCP.

Four questions should be asked when examining these data:

1. How accurate are the results?
2. How do the MCPs' rates compare to national percentiles?
3. How are the MCPs performing overall?
4. Can the MCPs do a better job calculating the measures?

The following paragraphs address these questions and explain the methods used in this report to present the results for clear, easy, and accurate interpretation.

1. How accurate are the results?

All of Ohio's CFC Medicaid MCPs are required by ODJFS to have their HEDIS results confirmed through an NCQA HEDIS Compliance Audit™.[2-1] As a result, any rate included in this report has been verified as an unbiased estimate of the measure. The NCQA HEDIS protocol is designed so that the hybrid method produces results with a sampling error of ± 5 percent, at a 95 percent confidence level.

How sampling error affects the accuracy of results is best explained using an example. Suppose an MCP uses the hybrid method to derive a *Comprehensive Diabetes Care—LDL-C Level <100* rate of 52 percent. Because of sampling error, the true rate is actually ± 5 percent of this rate—somewhere between 47 and 57 percent, at a 95 percent confidence level. If the target is a rate of 55 percent, it cannot be said with certainty whether the true rate between 47 and 57 percent meets or does not meet the target level.

To prevent such ambiguity, this report uses a standardized methodology that requires the reported rate to be at or above the threshold level to be considered as meeting the target. For internal purposes, MCPs should understand and consider the issue of sampling error when implementing interventions.

2. How do the MCPs' rates compare to national percentiles?

For each measure, an MCP ranking presents the reported rate in order from highest to lowest, with bars representing the established HPL, LPL, and the national HEDIS 2006 Medicaid 50th percentile.

Ohio's CFC Medicaid MCPs with reported rates above the 90th percentile (HPL) rank in the top 10 percent of all Medicaid MCPs nationally. Similarly, MCPs reporting rates below the 25th percentile (LPL) rank in the bottom 25 percent nationally for that measure.

[2-1] NCQA HEDIS® Compliance Audit™ is a trademark of the National Committee for Quality Assurance (NCQA).

3. How are the MCPs performing overall?

For each measure, a performance profile analysis shows the 2007 Ohio CFC Medicaid Managed Care Program weighted average for each rate and the national HEDIS 2006 Medicaid 50th percentile.

4. Can the MCPs do a better job of calculating the measures?

For each rate, a data collection analysis shows the number of MCPs using each methodology (hybrid or administrative). For all measures, the proportion of each reported rate resulting from administrative data and the proportion resulting from medical record review are displayed in a stacked bar figure. Values to the right of the stacked bars show precisely how much of the final rate was derived from the administrative method and from medical record review. Because of rounding differences, the sum of the administrative rate and the medical record review rate may not always be exactly equal to the final rate.

The 2007 Ohio's CFC Medicaid Managed Care Program aggregate bar represents the sum of all administrative events and medical record review events for all members in the statewide denominator, regardless of the data collection methodology used.

In addition, Section 6 of this report discusses HEDIS reporting capabilities of the MCPs.

Understanding Sampling Error

Correct interpretation of results for measures collected using the HEDIS hybrid method requires an understanding of sampling error. It is seldom possible logistically or financially to conduct medical record review for the entire eligible population for a given measure. Data collected using the HEDIS hybrid method includes only a sample from the population and uses statistical techniques to maximize the probability that the sample results reflect the experience of the entire eligible population.

For results to be generalized to the entire population, the process of sample selection requires that everyone in the eligible population have an equal chance of being selected. The HEDIS hybrid method prescribes a systematic sampling process for selecting 411 members of the eligible population. MCPs may use a 5 percent, 10 percent, 15 percent, or 20 percent oversample to replace invalid cases (for example, an adult selected for the *Childhood Immunization Status* measure). If an MCP has fewer than 411 valid cases in the eligible population, then the entire eligible population is selected.

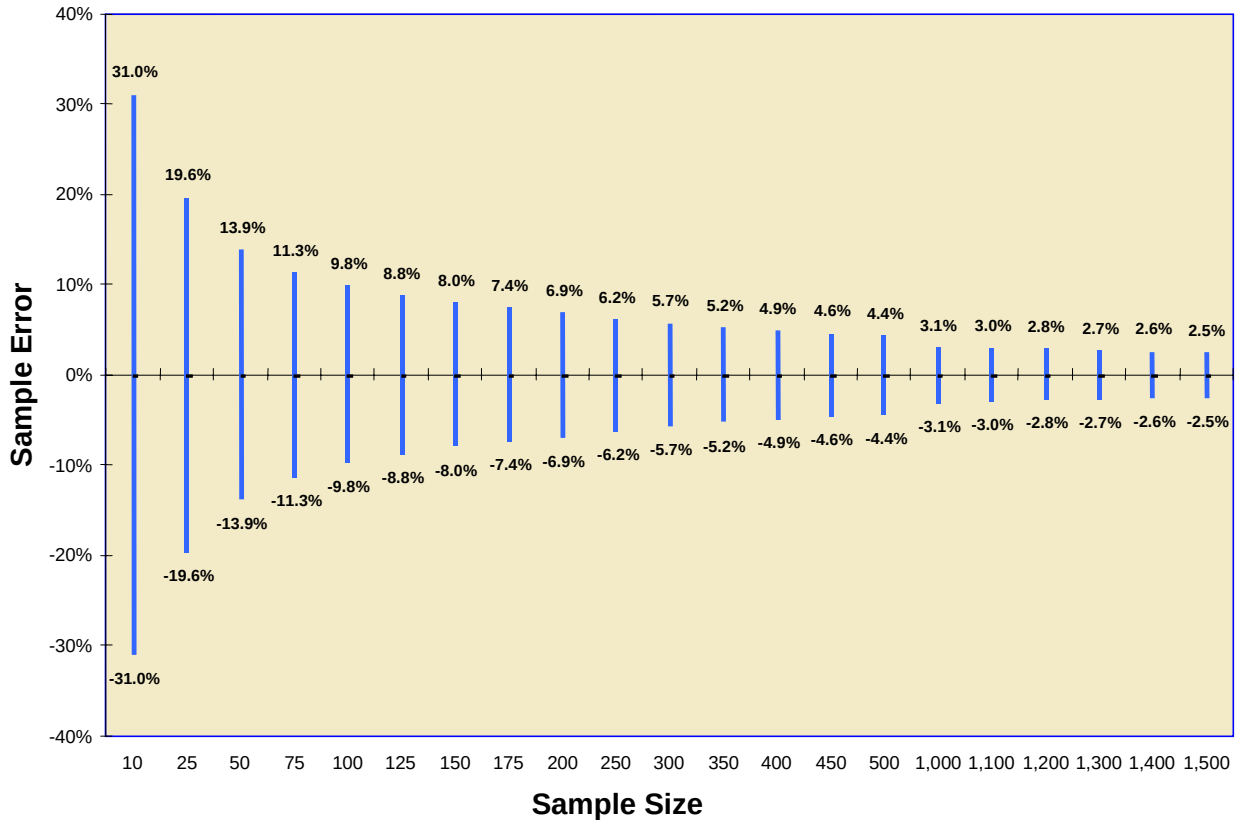
Figure 2-1 shows that if 411 MCP members are included in a measure, the margin of error is approximately ± 4.9 percent. Note that the data in this figure are based on the assumption that the size of the eligible population is greater than 2,000.

As the figure shows:

- Sampling error gets smaller as the sample size gets larger.
- Consequently, when sample sizes are very large and sampling errors are very small, almost any difference is statistically significant.
- However, not all statistically significant differences are important.
- Nevertheless, the difference between two measured rates may not be statistically significant but may still be important.

These points underscore the fact that meaningful data interpretation depends on the judgment of the reviewer.

Figure 2-1—Relationship of Sample Size to Sampling Error



Introduction

Pediatric primary health care is essential to prevention, recognition, and treatment of health conditions that could have significant developmental consequences for children and adolescents. The need for appropriate immunizations and health checkups has even greater importance and significance at younger ages. Over the last 50 years, childhood vaccination has led to the decline of many life-threatening diseases such a polio, tetanus, whooping cough, mumps, measles, and meningitis. However, in the United States, more than 20 percent of 2-year-olds are still missing one or more recommended immunizations.[3-1]

Immunizations not only help in the reduction of disease, they can also save costs related to the diseases. Childhood immunizations save $9.9 billion in direct medical costs and an additional $43.3 billion in indirect costs related to diphtheria, tetanus, and acellular pertussis (DTaP)/diphtheria and tetanus (DT); H influenza type B (HiB); inactivated polio vaccine (IPV); measles, mumps, and rubella (MMR); Hepatitis B; and varicella zoster virus (VZV)—chicken pox. Children who become infected with chicken pox miss an average of five to six school days. Adult caretakers miss an average of three to four days of work.[3-2]

Healthy People 2010 set a national goal of enrolling 95 percent of children from birth to 5 years of age in an immunization registry and completing vaccine coverage for the 4:3:1:3:3:1 series for 90 percent of all 2-year-olds by June 2007.[3-3,3-4] According to the Centers for Disease Control and Prevention's (CDC's) National Immunization Survey, it was estimated that 76.3 percent of Ohio children 19 to 35 months of age had received the 4:3:1:3:3:1 vaccination series.[3-5]

In February 2002, Ohio's first statewide immunization registry was implemented. The registry can be used by health care providers, hospitals, and MCPs. The registry can be queried for specific immunization records; upload records into the database; supply providers with a patient's immunization needs based on Advisory Committee on Immunization Practices recommendations; generate recall/reminder notices; produce immunization coverage reports by provider, region, and age group; and print official and consolidated immunization records.[3-6] As of 2005, 60 percent of children 4 months to 6 years of age in Ohio had two or more immunizations recorded in the State registry. Within the last six months of 2005, 70 percent of public providers and 80 percent of private providers were submitting data to the registry.[3-7]

[3-1] National Committee for Quality Assurance. *The State of Health Care Quality 2006* (Standard Version). Washington, DC: National Committee for Quality Assurance: 2006, p.28.

[3-2] Ibid.

[3-3] The 4:3:1:3:3 series includes 4 DTaP, 3 IPV, 1 MMR, 3 HiB, 3 Hepatitis B, and 1 VZV vaccine.

[3-4] Healthy People 2010: Objectives for Improving Health. Available at: http://www.healthypeople.gov/Document/HTML\Volume1\14Immunization.htm. Accessed on July 6, 2007.

[3-5] Centers for Disease Control and Prevention. National Immunization Survey: July 2005 - June 2006 Data Table. Available at: http://www.cdc.gov/vaccines/stats-surv/nis/data/tables_0506.htm. Accessed on July 6, 2007.

[3-6] American Immunization Registry Association. Registry Profile: Ohio. Available at: http://www.immregistries.org/public.php/ImmRegs/regMain.php?MainButton=Details&id=39. Accessed on July 6, 2007.

[3-7] Ibid.

The following pages provide detailed analyses of the MCPs' performance, ranking, and data collection methodology used for these measures.

Measures in this section include:

- *Childhood Immunization Status—Combination #2*
- *Childhood Immunization Status—Combination #3*

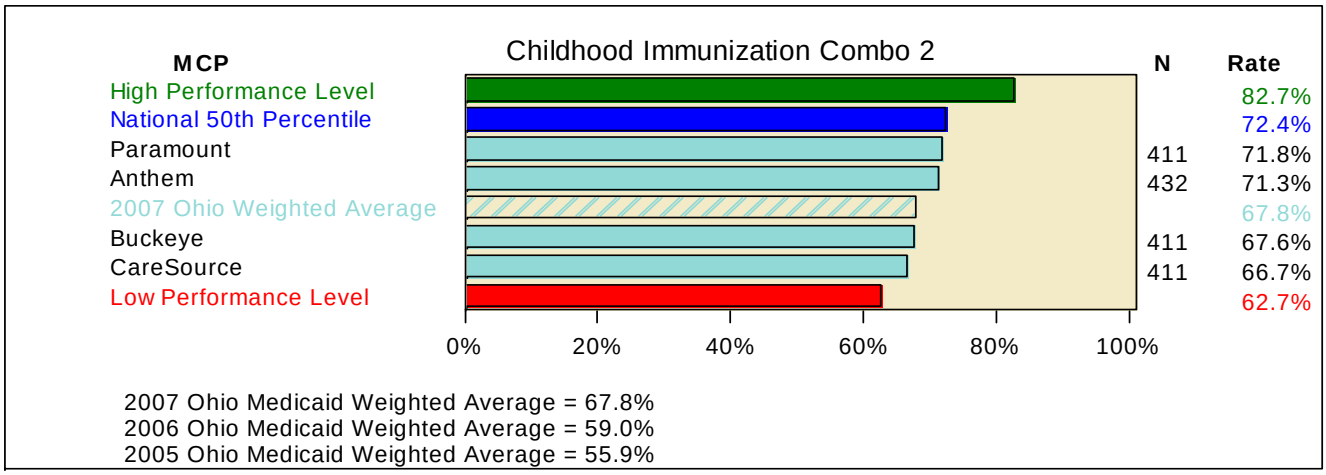
These are commonly referred to as *Combo #2* and *Combo #3*.

HEDIS Specification: *Childhood Immunization Status—Combination #2*

Childhood Immunization Status—Combination #2 calculates the percentage of enrolled children who turned 2 years of age during the measurement year, were continuously enrolled for 12 months immediately preceding their second birthday, and were identified as having four DTaP/DT, three IPV, one MMR, three HiB, three hepatitis B, and one VZV (chicken pox) vaccination, each within the allowable time period and by the member's second birthday.

MCP Ranking: *Childhood Immunization Status—Combination #2*

Figure 3-1—MCP Ranking:
Childhood Immunization Status—Combination #2

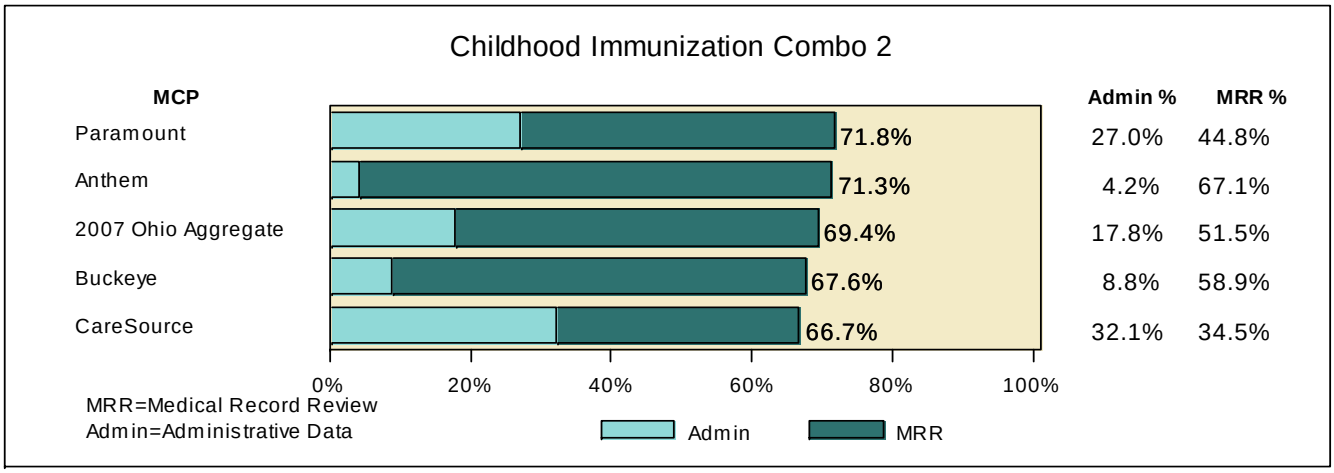


The 2007 Ohio's CFC Medicaid Managed Care Program weighted average of 67.8 percent was below the national HEDIS 2006 Medicaid 50th percentile of 72.4 percent. The 2007 weighted average increased 8.8 percentage points above the 2006 Ohio's CFC Medicaid Managed Care Program weighted average of 59.0 percent. This increase was statistically significant. The range of reported rates showed an upward shift from 2006 to 2007. The difference between the highest and lowest reported rates narrowed from 21.5 percent in 2006 to 5.1 percent in 2007. This suggests that the lower performing MCPs are improving.

None of the MCPs performed above the national HEDIS 2006 Medicaid 50th percentile; however, none of Ohio's CFC Medicaid MCPs' reported rates were below the LPL. In 2006, two MCPs performed below the LPL.

Data Collection Analysis: *Childhood Immunization Status—Combination #2*

Figure 3-2—Data Collection Analysis:
Childhood Immunization Status—Combination #2



The figure above shows the breakout of rates that were derived from administrative data and medical record review for *Childhood Immunization Status—Combination #2*.

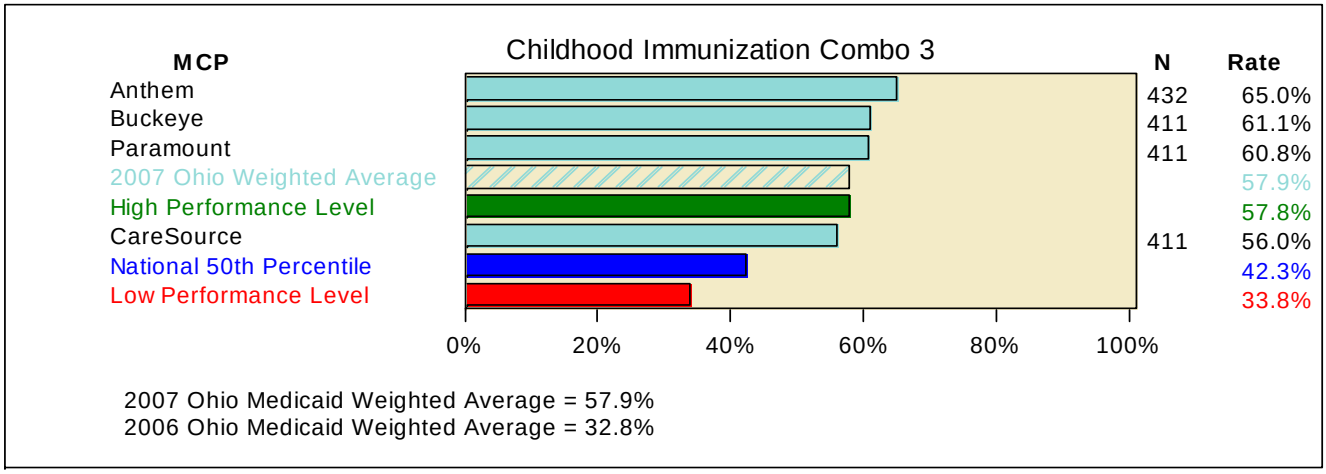
The hybrid method was used by all MCPs to calculate this measure. The 2007 Ohio's CFC Medicaid Managed Care Program aggregate administrative rate was 17.8 percent, and the medical record review rate was 51.5 percent. As in previous measurement years, a majority of the reported rates were derived from medical record review as opposed to administrative data for this indicator. The high medical record review rates demonstrated that the MCPs are still not receiving complete administrative immunization data. Of particular concern is obtaining the data for immunizations administered at locations that are not contracted directly with the MCP.

HEDIS Specification: *Childhood Immunization Status—Combination #3*

Childhood Immunization Status—Combination #3 calculates the percentage of enrolled children who turned 2 years of age during the measurement year, were continuously enrolled for 12 months immediately preceding their second birthday, and were identified as having four DTaP/DT, three IPV, one MMR, three Hib, three hepatitis B, one varicella-zoster virus, and four pneumococcal conjugate vaccinations (PCV), each within the allowable time period and by the member's second birthday.

MCP Ranking: *Childhood Immunization Status—Combination #3*

Figure 3-3—MCP Ranking:
Childhood Immunization Status—Combination #3

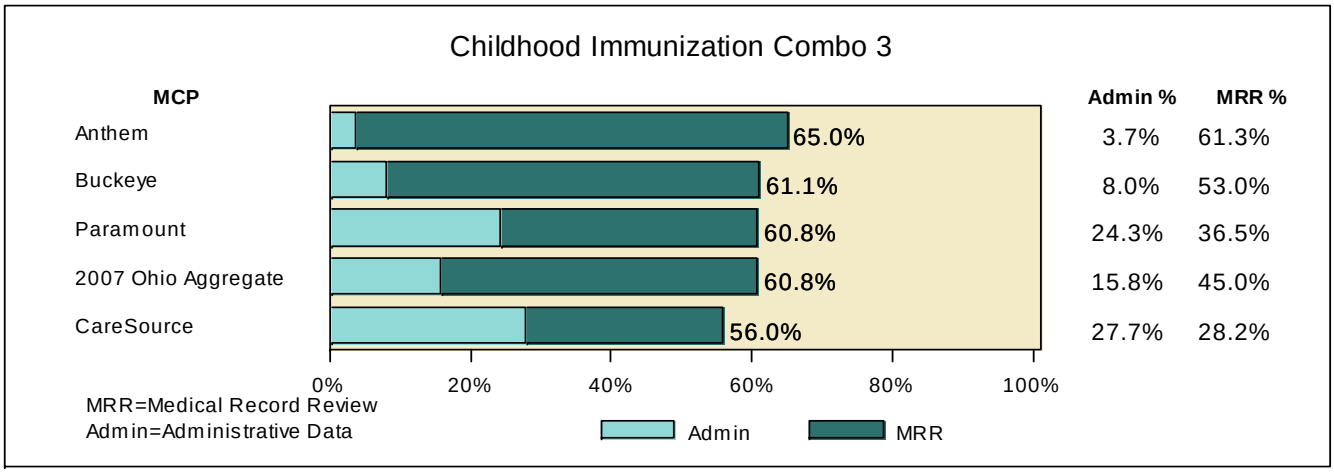


In 2006, *Childhood Immunization Status—Combination #3* was a new measure. Therefore, 2007 was the first year that national performance data were available for comparison. In addition, because this is a second-year measure, significant increases in performance were expected.

Figure 3-3 shows the MCP ranking for *Childhood Immunization Status—Combination #3*. The 2007 Ohio's CFC Medicaid Managed Care Program weighted average of 57.9 percent was above the national HEDIS 2006 Medicaid 50th percentile of 42.3 percent. The 2007 weighted average increased 25.1 percentage points above the 2006 weighted average of 32.8 percent. The increase in weighted averages from 2006 to 2007 was statistically significant. The MCPs' reported rates ranged from a low of 56.0 percent to a high of 65.0 percent. The 2007 weighted average of 57.9 percent was above the HPL of 57.8 percent, and three of the four MCPs also performed above the HPL.

Data Collection Analysis: Childhood Immunization Status—Combination #3

Figure 3-4—Data Collection Analysis:
Childhood Immunization Status—Combination #3



The figure above shows the breakout of rates that were derived from administrative data and medical record reviews for *Childhood Immunization Status—Combination #3*.

All MCPs with reported rates elected to use the hybrid method to calculate this measure. The 2007 Ohio's CFC Medicaid Managed Care Program aggregate administrative rate was 15.8 percent, and the medical record review rate was 45.0 percent. As with *Combination #2*, the majority of the reported rates were derived from medical record review data.

Childhood Immunization Status—Individual Antigen, *Combo #2*, and *Combo #3* Rates by MCP

Table 3-1—*Individual Antigen*, *Combo #2*, and *Combo #3* Rates by MCP: *Childhood Immunization Status*

IDSS	MCP	DT	IPV	MMR	HIB	HEP	VZV	PCV	Combo 2	Combo 3
7490	Anthem	77.3%	86.8%	90.0%	91.0%	91.0%	86.3%	72.0%	71.3%	65.0%
6855	Buckeye	77.6%	87.1%	90.3%	89.8%	87.6%	83.5%	69.3%	67.6%	61.1%
6706	CareSource	74.5%	88.8%	90.5%	88.6%	88.6%	85.6%	66.7%	66.7%	56.0%
7339	Paramount	77.9%	92.2%	91.5%	93.7%	93.9%	87.6%	68.9%	71.8%	60.8%
	2007 Ohio Medicaid Weighted Average	75.4%	88.7%	90.5%	89.4%	89.2%	85.7%	67.7%	67.8%	57.9%
	2006 Ohio Medicaid Weighted Average	68.5%	79.0%	83.8%	83.5%	78.2%	78.9%	39.7%	59.0%	32.8%
	2005 Ohio Medicaid Weighted Average	73.5%	84.9%	87.0%	76.5%	80.8%	76.8%	- -	55.9%	- -
	National HEDIS 2006 Medicaid 50th Percentile	79.0%	87.8%	90.8%	89.5%	88.0%	88.6%	47.3%	72.4%	42.3%

Paramount was the only reporting MCP to perform above the 2007 weighted average for all of the individual antigens, *Combo #2*, and *Combo #3*. Paramount's individual antigen rates also exceeded the national HEDIS 2006 Medicaid 50th percentile except for DTaP/DT and VZV. For all the reporting MCPs, the individual antigen rates for DTaP/DT continued to have consistently lower rates than the other individual antigens. PCV also had lower rates than the other antigens; however, there was an increase of 28 percentage points in the weighted average from 2006 to 2007 for this antigen.

Childhood Immunization Status Trending

Table 3-2—Trending Results by MCP:
Childhood Immunization Status—Combination #2

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7490	Anthem	- -	- -	71.3%	- -	NA
6855	Buckeye	- -	49.1%	67.6%	18.5%	↑
6706	CareSource	55.2%	58.4%	66.7%	8.3%	↔
7339	Paramount	56.7%	70.6%	71.8%	1.2%	↔
	Medicaid Weighted Averages	55.9%	59.0%	67.8%	8.8%	↔
	National HEDIS Medicaid 50th Percentile	61.1%	66.0%	72.4%	- -	- -

Table 3-2 presents the *Childhood Immunization Status—Combination #2* trending results for the MCPs and Ohio's CFC Medicaid Managed Care Program weighted average. The only MCP that had an increase greater than 10 percentage points from 2006 to 2007 was Buckeye. Rates for CareSource, Paramount, and the weighted average did increase, but not by 10 percentage points or more.

Table 3-3—Trending Results by MCP:
Childhood Immunization Status—Combination #3

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7490	Anthem	- -	- -	65.0%	- -	NA
6855	Buckeye	- -	33.8%	61.1%	27.3%	↑
6706	CareSource	- -	29.7%	56.0%	26.3%	↑
7339	Paramount	- -	42.3%	60.8%	18.5%	↑
	Medicaid Weighted Averages	- -	32.8%	57.9%	25.1%	↑
	National HEDIS Medicaid 50th Percentile	- -	- -	42.3%	- -	- -

Table 3-3 presents the *Childhood Immunization Status—Combination #3* trending results for the MCPs and Ohio's CFC Medicaid Managed Care Program weighted average. All of the MCPs that reported rates last year and the weighted average results had increases of more than 10 percentage points from 2006 to 2007. Buckeye had the greatest improvement with an increase of 27.3 percentage points.

Childhood Immunization Status (Combo #2 and *Combo #3)* Findings and Recommendations

The key findings indicate that:

- For the fourth year in a row, Ohio's CFC Medicaid Managed Care Program's weighted average for *Childhood Immunization Status—Combination #2* was lower than the national HEDIS Medicaid 50th percentile.
- The weighted average for *Combo #2* has increased in three years from 55.9 percent in 2005 to 67.8 percent in 2007.
- The weighted average for *Childhood Immunization Status—Combination #3* increased significantly from 2006 to 2007 by 25.1 percentage points.
- The weighted average and three MCPs exceeded the HPL for *Combo #3*.
- For the *Childhood Immunization Status* measures, the majority of the immunization data used to report the measures required medical record review.

Although the rates increased overall for *Combo #2*, they are still lower than the 50th percentile. However, a positive upward trend has been identified over the past four years for *Combo #2* rates, which indicates that the MCPs have improved outreach and/or data collection techniques.

The MCPs continue to rely heavily on medical record review to obtain immunization data, similar to national trends. The MCPs should, however, continue to work toward increasing their collection of administrative data. This effort could be maximized through the use of Ohio's immunization registry. By encouraging providers to use the registry, the data would be more complete; therefore, the burden of medical record collection could be decreased, and immunization rates could increase. The MCPs could also concentrate on educating providers regarding submission of claims and encounter data. The MCPs could review the records of children in the *Childhood Immunization Status* sample with missing service data. The MCPs could then identify and work with the physicians assigned to these members to ensure future submissions of immunization service data.

In addition, the MCPs should continue evaluating cases that are defined as missed opportunities. The MCPs should evaluate noncompliant cases (children in the eligible population who did not meet numerator compliance) and try to determine the reasons they were noncompliant. Barriers to improvement should be identified and evaluated in terms of greatest impact. A good barrier analysis can assist in targeting interventions that would bring about the most effective results. Areas to consider include:[3-8]

- Availability of vaccines—Are vaccine services readily available and patient costs minimized?
- Assessment of vaccination status—Does the provider review the patient's vaccination history during each encounter?

[3-8] Centers for Disease Control and Prevention. "Recommendations and Guidelines: Revised Standards for Immunization Practices." April 18, 2006. Available at: http://www.cdc.gov/vaccines/recs/vac-admin/rev-immz-stds.htm. Accessed on September 11, 2007.

- Effective communication about vaccine benefits and risks—Are parents/guardians appropriately educated about the benefits and risks of vaccines? Is this communication culturally and linguistically appropriate?
- Proper storage and administration of vaccines and documentation of vaccinations—Do providers receive continuous education and protocols on proper vaccine use, storage, and reporting?
- Implementation of strategies to improve vaccination coverage—Are systems in place to remind providers and patients when vaccinations are due? Is an assessment of the medical record for vaccination coverage completed?

Assessment, Feedback, Incentives, and eXchange (AFIX) is a quality improvement strategy developed by the CDC that targets practices at the provider level to help improve immunization coverage. AFIX's four-part strategy includes:

- Assessment of the health care provider's vaccination coverage levels and immunization practices.
- Feedback of results to the provider along with recommended strategies to improve coverage levels.
- Incentives to recognize and reward improved performance.
- e**X**change of health care information and resources necessary to facilitate improvement.[3-9]

The assessment and feedback phases are data-driven. CDC offers a Comprehensive Clinic Assessment Software Application (CoCASA) tool, which can be used for these two phases. This tool allows an assessment of immunization practices to be completed within a clinic, private practice, or any other environment where immunizations are provided. The tool can be used to pinpoint areas of strength and areas for improvement at the individual provider level. By using a tool such as the CoCASA, Ohio's CFC Medicaid Managed Care Program could identify areas that, if improved, could help performance of the statewide immunization rates. The incentive and exchange phases may include methods that "stimulate competition among provider sites, encourage provider participation and mutual support, recognize successful solutions, and promote the exchange of results and ideas."[3-10]

The Ohio Chapter of the American Academy of Pediatrics (AAP), with a grant from the Ohio Department of Health, carries out the Maximizing Office Based Immunization (MOBI) program. MOBI is a free statewide provider immunization education and training program in which the MCPs could require their providers to participate to improve rates. As part of the MOBI program, an AFIX assessment of the providers' rates is conducted, which could be used by the MCPs to assess their providers.

[3-9] Centers for Disease Control and Prevention. Assessment, Feedback, Incentives, and Exchange (AFIX). Available at: http://www.cdc.gov/vaccines/programs/afix/default.htm. Accessed on September 14, 2007.

[3-10] Centers for Disease Control and Prevention. Comprehensive Clinic Assessment Software Application (CoCASA). Available at: http://www.cdc.gov/vaccines/programs/cocasa/default.htm. Accessed on September 14, 2007.

Finally, the MCPs should consider implementing established best practices as a guide to improving immunization rates. The following list contains examples of several best practices:

- The staging of a series of statewide educational events involving children during National Infant Immunization Week by the California Distance Learning Health Network and the California Coalition for Childhood Immunization. The campaign included four main resources: a campaign kit, a media tool kit, a press packet, and toys.[3-11]
- Creation of a parent notebook that allows parents to track immunizations.
- Meeting with high-volume providers to enhance the relationship between the plan and providers, review the importance of complete immunization records, and develop workable reporting procedures.
- Written vaccination protocols that are up-to-date and accessible at all locations where vaccines are administered.[3-12]
- The addition of a question about immunization status to any welcome calls made to new members.

[3-11] American Academy of Pediatrics. Immunization Initiatives. Available at: http://www.cispimmunize.org/pro/pro_main.html.

[3-12] American Academy of Pediatrics. Maintaining Standards of Excellence. Available at: http://www.cispimmunize.org/pro/pro_main.html

Introduction

In the United States, immunization programs that focus on infants and children have decreased the occurrence of many vaccine-preventable diseases. However, adolescents and young adults continue to be adversely affected by vaccine-preventable diseases (e.g., varicella, hepatitis B, measles, and rubella), partly because many immunization programs have placed less emphasis on improving vaccination coverage among adolescents. Potential barriers to achieving high rates of varicella immunization among adolescents include the misconception that varicella is uniformly a mild disease that typically impacts younger children. Furthermore, prior to 2005, the only routinely recommended vaccines for adolescents were the tetanus and diphtheria toxoids (Td) boosters. However, as additional vaccines have been released for administration to the adolescent population, and as new vaccines are being developed, it will be important for providers to focus immunization efforts on this adolescent population.[4-1] An additional concern that has been cited in a recent study is that physicians are more likely to assess immunization status, administer indicated immunizations, and schedule return immunization visits to younger adolescents (11 to 13 years of age) than to older adolescents (14 to 18 and 19 to 21 years of age).[4-2]

Immunizations also reduce costs that can occur with harmful disease. The MMR vaccine, for example, saves $16.34 in direct medical costs for every dollar spent. Immunizations are one of the most cost-effective health intervention strategies available, saving the nation more than $5 in direct health care costs for each dollar spent.[4-3]

The measure in this section is:

- *Adolescent Immunization Status—Combination #2*

This is commonly referred to as *Combo #2*.

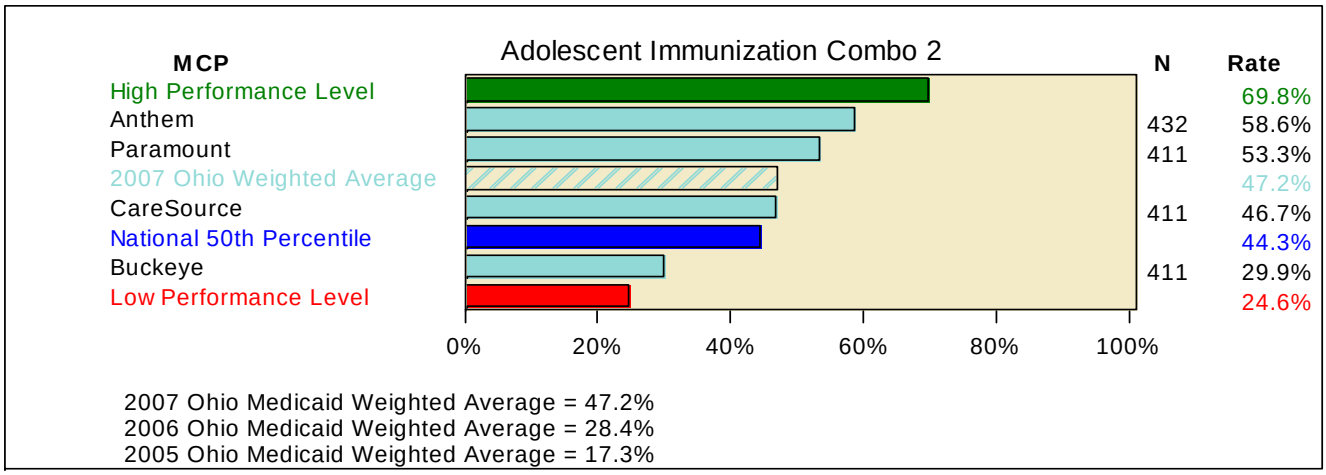
[4-1] Centers for Disease Control and Prevention. *National Immunization Program Annual Report. 2006.*
[4-2] Oster N, et al. Journal of the American Board of Family Practice. *Barriers to Adolescent Immunization: A Survey of Family Physicians and Pediatricians.* 2005. 18:13-19.
[4-3] National Committee for Quality Assurance. *The State of Managed Care Quality. 2006* (Standard Version). Washington, DC: National Committee for Quality Assurance; 2006.

HEDIS Specification: *Adolescent Immunization Status—Combination #2*

The *Adolescent Immunization Status—Combination #2* measure calculates the percentage of enrolled adolescents who turned 13 years of age during the measurement year, were continuously enrolled for 12 months immediately prior to their 13th birthday, and were identified as having the following vaccinations: second dose of MMR, three hepatitis B vaccinations, and at least one VZV within the allowed time period and by the member's 13th birthday.

MCP Ranking: *Adolescent Immunization Status—Combination #2*

Figure 4-1—MCP Ranking:
Adolescent Immunization Status—Combination #2

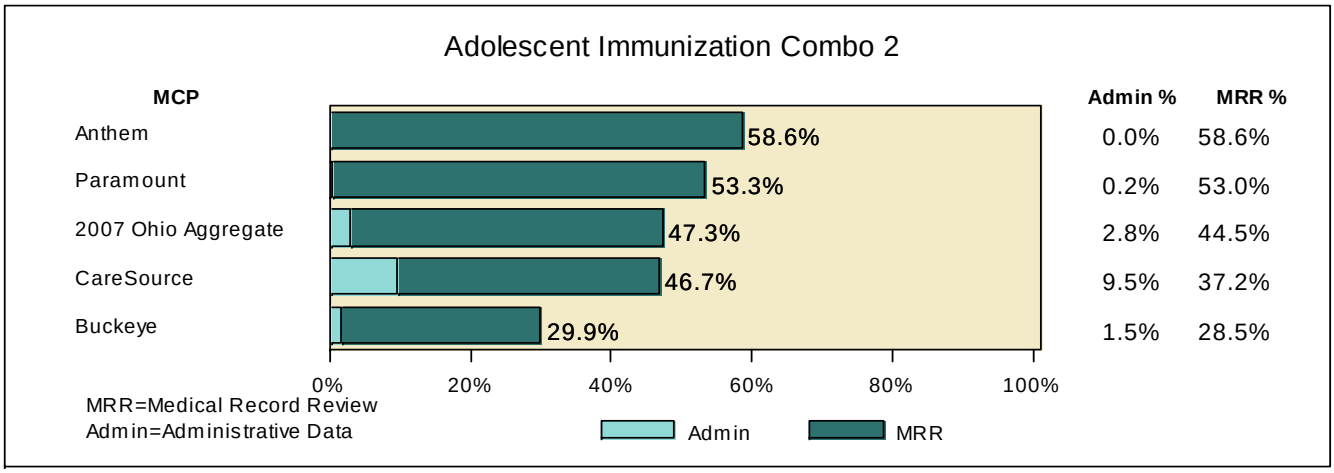


The 2007 Ohio's CFC Medicaid Managed Care Program weighted average of 47.2 percent was 2.9 percentage points above the national HEDIS 2006 Medicaid 50th percentile of 44.3 percent. Anthem and Paramount exceeded both the 2007 Ohio's CFC Medicaid Managed Care Program weighted average and the national HEDIS 2006 Medicaid 50th percentile. Buckeye, on the other hand, fell below the 50th percentile. CareSource fell below the 2007 weighted average but was above the national HEDIS 2006 Medicaid 50th percentile. The MCPs' reported rates ranged from 29.9 percent to 58.6 percent, a difference of 28.7 percentage points.

The 2007 Ohio's CFC Medicaid Managed Care Program weighted average was 18.8 percentage points higher than the 2006 weighted average. This increase was statistically significant.

Data Collection Analysis: *Adolescent Immunization Status—Combination #2*

Figure 4-2—Data Collection Analysis:
Adolescent Immunization Status—Combination #2



The figure above displays the breakout of rates that were derived from administrative data and medical record review for *Adolescent Immunization Status—Combination #2*.

All of the MCPs with reported rates elected to use the hybrid method for calculation of this measure; however, one MCP derived its rate entirely from medical record review. The 2007 Ohio's CFC Medicaid Managed Care Program aggregate administrative rate was 2.8 percent, and the medical record review rate was 44.5 percent.

All of the MCPs had a majority of their rates derived from medical record review, as also observed in the *Childhood Immunization Status* measures, which is fairly common given the large variety of providers (including primary care providers [PCPs], county health departments, health fairs, etc.) that provide immunizations to Medicaid members. However, Anthem's inability to collect any of its data administratively suggests that the MCP should focus on obtaining more complete data.

Adolescent Immunization Status—Individual Antigen and *Combo #2* Rates

Table 4-1—*Individual Antigen* and *Combo #2* Rates by MCP: *Adolescent Immunization Status*

IDSS	MCP	MMR	HEP	VZV	Combo 2
7490	Anthem	81.3%	73.8%	62.7%	58.6%
6855	Buckeye	67.4%	58.6%	35.5%	29.9%
6706	CareSource	76.9%	69.8%	54.0%	46.7%
7339	Paramount	79.6%	70.8%	57.2%	53.3%
	2007 Ohio Medicaid Weighted Average	76.7%	69.3%	53.6%	47.2%
	2006 Ohio Medicaid Weighted Average	63.7%	43.7%	39.1%	28.4%
	2005 Ohio Medicaid Weighted Average	67.0%	40.4%	27.2%	17.3%
	National HEDIS 2006 Medicaid 50th Percentile	75.6%	67.1%	52.2%	44.3%

Anthem and Paramount performed above the 2007 Ohio's CFC Medicaid Managed Care Program weighted average for all of the individual antigens and the *Combo #2* indicator. The 2007 weighted averages were all above the national HEDIS 2006 Medicaid 50th percentile, and all the weighted averages showed improvement greater than 10 percentage points over the 2006 rates. Furthermore, three MCPs performed above the national HEDIS 2006 Medicaid 50th percentile for all of the individual antigens and the *Combo #2* indicator.

Adolescent Immunization Status (Combo #2) Trending

Table 4-2—Trending Results by MCP:
Adolescent Immunization Status—Combination #2

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7490	Anthem	- -	- -	58.6%	- -	NA
6855	Buckeye	- -	27.7%	29.9%	2.2%	↔
6706	CareSource	12.4%	25.5%	46.7%	21.2%	↑
7339	Paramount	27.3%	40.4%	53.3%	12.9%	↑
	Medicaid Weighted Averages	17.3%	28.4%	47.2%	18.8%	↑
	National HEDIS Medicaid 50th Percentile	33.2%	38.5%	44.3%	- -	- -

Table 4-2 presents *Adolescent Immunization Status—Combination #2* trending results for the MCPs and Ohio's CFC Medicaid Managed Care Program weighted average. CareSource, Paramount, and the weighted average had increases of greater than 10 percentage points from 2006 to 2007. Buckeye had an increase of 2.2 percentage points from 2006 to 2007.

Adolescent Immunization Status (Combo #2) Findings and Recommendations

The key findings indicate that:

- The 2007 Ohio's CFC Medicaid Managed Care Program weighted average for *Adolescent Immunization Status—Combination #2* increased significantly by 18.8 percentage points from 2006 and was above the national HEDIS 2006 Medicaid 50th percentile.
- The range between the MCP with the highest rate and the MCP with the lowest rate was 28.7 percent, indicating high variance among the MCPs.
- Rates for two of the MCPs and the 2007 weighted average for *Combo #2* increased significantly from 2006 to 2007.

For 2007, the increase in all of the antigens' rates by no less than 10 percent has positively affected the rate for *Combo #2*. The MMR, Hepatitis B, and VZV antigen rates increased by 13 percentage points, 25.6 percentage points, and 14.5 percentage points, respectively, from 2006 to 2007. This increase played a major role in the overall *Adolescent Immunization Status—Combination #2* weighted average increasing 18.8 percentage points, and all individual antigen rates and the weighted average exceeding the national HEDIS 2006 Medicaid 50th percentile. The increased rates for *Adolescent Immunization Status* suggest that improvement efforts took place during the measurement year to increase performance on this measure.

For 2008, the *Adolescent Immunization Status* measure will be retired from the HEDIS measurement set. Due to the importance of immunizations in preventing disease, it is still important that the MCPs continue their quality improvement efforts toward improving adolescent immunizations because NCQA intends to bring back the measure for HEDIS 2009 with refocused specifications.[4-4]

[4-4] National Committee for Quality Assurance. *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC: National Committee for Quality Assurance; 2007.

Introduction

As the sixth-leading cause of death by disease in the United States, diabetes is a complex disease that affects multiple organs, which can sometimes lead to additional chronic conditions such as heart disease, blindness, kidney disease, stroke, and even death.[5-1] The American Diabetes Association estimates that 20.8 million people in the United States, or 7 percent of the population, suffer from diabetes; however, only 14.6 million have been formally diagnosed with the disease.[5-2] As of 2005, 7.7 percent of Ohio's population was living with the disease.[5-3]

Diabetes and its complications cost the nation nearly $132 billion a year, including $92 billion in direct medical costs and $40 billion in indirect costs due to lost productivity. The average yearly health care cost for a person with diabetes was $13,243 in 2002, compared with $2,560 for a person without diabetes. The ability to control diabetes can significantly reduce the rate of complications and improve quality of life for diabetics. It is estimated that for every 1 percent reduction in blood glucose levels, the risk of developing eye or kidney/end-stage renal disease and requiring lower-extremity amputation drops by 40 percent.[5-4]

Multiple factors must be examined for a comprehensive assessment of diabetes care. The *Comprehensive Diabetes Care* measure contains a variety of indicators, each of which provides a critical element of information. These indicators are consistent with the Diabetes Quality Improvement Project (DQIP) set of measures (excluding foot care). The DQIP is a national quality-of-care project sponsored by the Centers for Medicare & Medicaid Services (CMS), the American Diabetes Association (ADA), the Foundation for Accountability (FACCT), and NCQA. Together, the components present a comprehensive picture for a better understanding of the quality of diabetes care.

In HEDIS, the *Comprehensive Diabetes Care* measure is reported using nine rates: (1) *HbA1c Testing*, (2) *Poor HbA1c Control*, (3) *Good HbA1c Control* (4) *Eye Exam*, (5) *LDL-C Screening*, (6) *LDL-C Level <100*, (7) *Medical Attention for Diabetic Nephropathy*, (8) *Blood Pressure Level <130/80*, and (9) *Blood Pressure Level <140/90*.

The following pages show in detail the MCP rankings and analysis of data collection methodology used by the MCPs for each of these measures. It should be noted that in 2006 five health plans were included in the calculation of the weighted averages, and in 2007 seven health plans were included in the calculation of the weighted averages. Therefore, caution should be used when comparing the 2006 weighted averages to the 2007 weighted averages due to possible fluctuations in the weighted averages and a variance in the number of MCPs evaluated from 2006 to 2007.

[5-1] National Committee for Quality Assurance. *The State of Health Care Quality, 2006* (Standard Version). Washington, DC: National Committee for Quality Assurance; 2006: p. 32.

[5-2] American Diabetes Association. *Total Prevalence of Diabetes & Pre-Diabetes.* Available at: http://www.diabetes.org/utils/printthispage.jsp?PageID=STATISTICS_233187. Accessed on: July 6, 2007.

[5-3] Centers for Disease Control and Prevention. Prevalence Data, Ohio- 2005 Diabetes. Available at: http://apps.nccd.cdc.gov/brfss/display.asp?cat=DB&yr=2005&qkey=1363&state=OH. Accessed on: July 11, 2007.

[5-4] National Committee for Quality Assurance. *The State of Health Care Quality, 2006* (Standard Version). Washington, DC: National Committee for Quality Assurance; 2006: p. 32.

Comprehensive Diabetes Care—HbA1c Testing

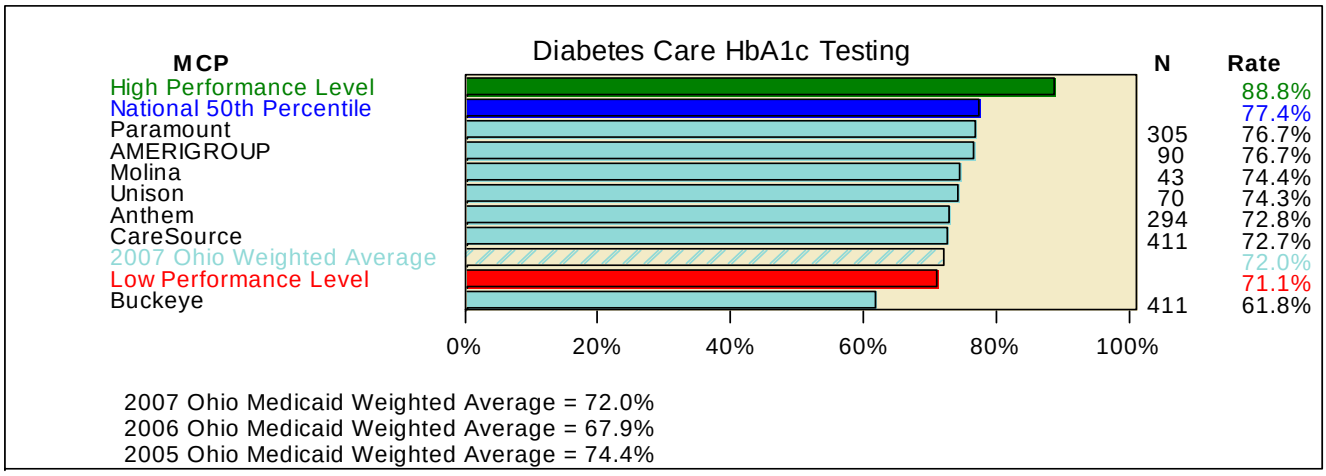
The HbA1c test (hemoglobin A1c test) is a lab test that reveals average blood glucose over a period of two to three months. The test takes advantage of the life cycle of red blood cells by measuring the number of glucose molecules attached to hemoglobin in red blood cells. Although constantly replaced, individual cells live for about four months. By measuring attached glucose in a current blood sample, average blood sugar levels over the previous two to three months can be determined. HbA1c test results are expressed as a percentage, with 4 percent to 6 percent considered normal. The HbA1c tests give a big-picture view of blood glucose levels, complementing the day-to-day snapshots obtained from the self-monitoring of blood glucose (mg/dL).

HEDIS Specification: Comprehensive Diabetes Care—HbA1c Testing

The *Comprehensive Diabetes Care—HbA1c Testing* rate was the percentage of members 18 to 75 years of age with diabetes (Type 1 and Type 2), who were continuously enrolled during the measurement year and had one or more HbA1c test(s) conducted during the measurement year. Members who had received the test were identified through either administrative data or medical record review.

MCP Ranking: Comprehensive Diabetes Care—HbA1c Testing

Figure 5-1—MCP Ranking:
Comprehensive Diabetes Care—HbA1c Testing



The 2007 Ohio's CFC Medicaid Managed Care Program's weighted average of 72.0 percent fell below the national HEDIS 2006 Medicaid 50th percentile rate of 77.4 percent. None of the MCPs exceeded the 50th percentile, and one MCP fell below the LPL of 71.1 percent. Although the 2007 weighted average exceeded the 2006 weighted average by 4.1 percentage points, the rate was still below the 2005 weighted average by 2.4 percentage points. The reported rates ranged from a high of 76.7 percent to a low of 61.8 percent, a difference of 14.9 percentage points. The increase of 4.1 percentage points from the 2006 weighted average to the 2007 weighted average was not statistically significant.

Data Collection Analysis: Comprehensive Diabetes Care—HbA1c Testing

Figure 5-2—Data Collection Analysis:
Comprehensive Diabetes Care—HbA1c Testing

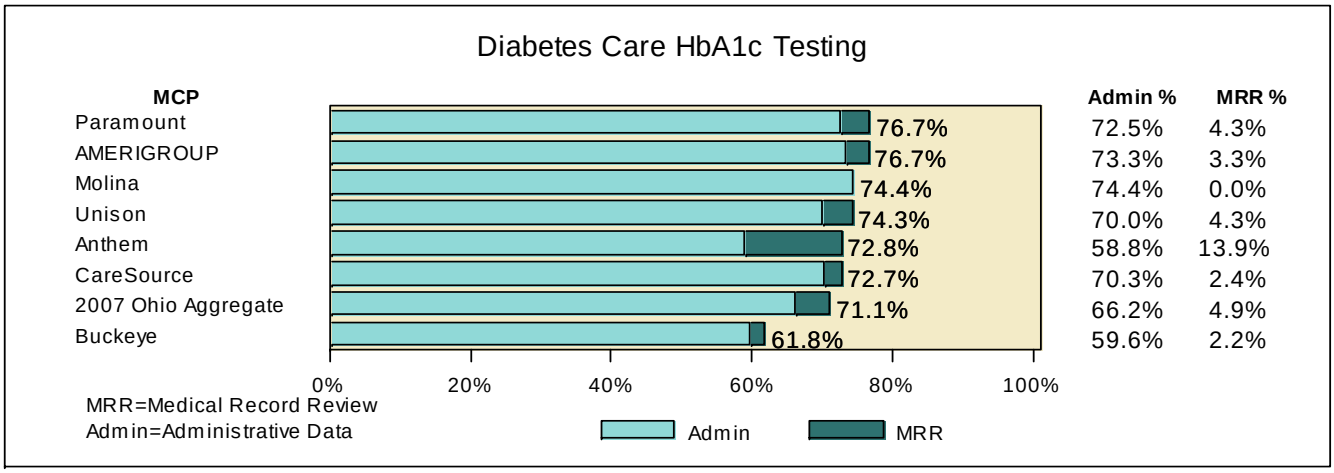


Figure 5-2 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—HbA1c Testing*.

All of the MCPs elected to use the hybrid method to calculate this measure. The 2007 Ohio's CFC Medicaid Managed Care Program's aggregate administrative rate was 66.2 percent, and the medical record review rate was 4.9 percent. This result illustrated that overall, 93.1 percent of the aggregate rate was derived from administrative data and only 6.9 percent from medical record review. In 2006, 97.6 percent of the aggregate rate was derived from administrative data. These findings indicated that the MCPs' lab encounter and claims data were relatively complete across Ohio's CFC Medicaid Managed Care Program.

Comprehensive Diabetes Care—Poor and *Good HbA1c Control*

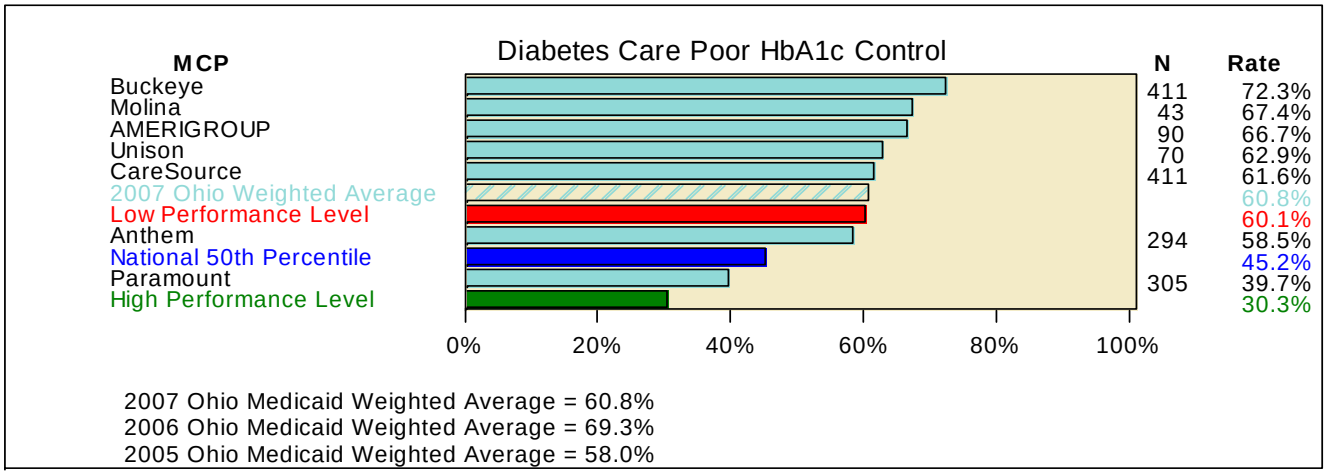
HbA1c control improves quality of life, increases work productivity, and decreases health care utilization. Decreasing the HbA1c level lowers the risk of diabetes-related death. Controlling blood glucose levels in people with diabetes significantly reduces the risk for blindness and kidney and nerve disease. For every percentage drop in the results of a person's HbA1c blood test, the risk of these diseases is reduced by 40 percent.[5-5]

HEDIS Specification: Comprehensive Diabetes Care—Poor HbA1c Control

The *Comprehensive Diabetes Care—Poor HbA1c Control* rate was the percentage of members 18 to 75 years of age with diabetes (Type 1 and Type 2), who were continuously enrolled during the measurement year and whose most recent HbA1c test conducted during the measurement year showed an HbA1c level of more than 9 percent, as documented through automated laboratory data and/or medical record review. If there was not an HbA1c level during the measurement year, the level was considered to be more than 9 percent (i.e., no test was counted as poor HbA1c control).

MCP Ranking: Comprehensive Diabetes Care—Poor HbA1c Control

Figure 5-3—MCP Ranking:
Comprehensive Diabetes Care—Poor HbA1c Control



Note: For this measure, a lower rate indicated better performance (i.e., low rates of *Poor HbA1c Control* indicated better care).

This measure examined *Comprehensive Diabetes Care—Poor HbA1c Control* and, in this case, a lower rate indicated better performance. The 2007 Ohio's CFC Medicaid Managed Care Program weighted average of 60.8 percent and five MCPs' rates were higher than the LPL of 60.1 percent, indicating poorer care.

[5-5] American Diabetes Association. "Complications of Diabetes in the United States." Available at: http://www.diabetes.org/diabetes-statistics/complications.jsp. Accessed on: July 9, 2007.

The 2007 Ohio's CFC Medicaid Managed Care Program's weighted average decreased from the 2006 weighted average by 8.5 percentage points, indicating improvement across Ohio's CFC Medicaid Managed Care Program. This decrease, however, was not found to be statistically significant. Two MCPs outperformed the 2007 weighted average, with one MCP performing better than the national HEDIS 2006 Medicaid 50th percentile.

Data Collection Analysis: Comprehensive Diabetes Care—Poor HbA1c Control

Figure 5-4—Data Collection Analysis:
Comprehensive Diabetes Care—Poor HbA1c Control

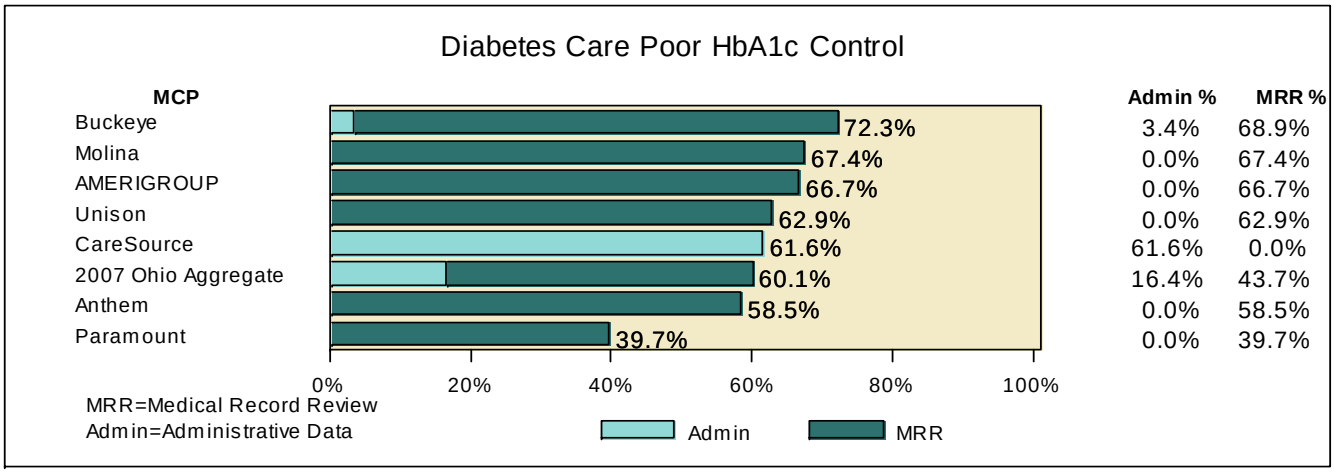


Figure 5-4 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—Poor HbA1c Control*. For this numerator, an examination of the breakout of data from administrative and medical record sources must be made with extreme caution. Members who had no HbA1c screening were automatically included as numerator-compliant for this indicator, and there was little consistency as to which data source (administrative or medical record) the MCP attributed these numerator events.

All of the MCPs elected to use the hybrid method to calculate this measure. However, five of the MCPs attributed all of their data collection to medical record review, and one MCP attributed all of its data collection to administrative data. The 2007 Ohio's CFC Medicaid Managed Care Program aggregate administrative rate was 16.4 percent and the medical record rate was 43.7 percent.

HEDIS Specification: Comprehensive Diabetes Care—Good HbA1c Control

The *Comprehensive Diabetes Care—Good HbA1c Control* rate reports the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and whose most recent HbA1c test conducted during the measurement year showed an HbA1c level of less than 7 percent, as documented through automated laboratory data and/or medical record review. If an HbA1c level was not collected during the measurement year, the level was considered to be greater than 7 percent, which meant that the member was not numerator compliant.

MCP Ranking: Comprehensive Diabetes Care—Good HbA1c Control

Figure 5-5—MCP Ranking:
Comprehensive Diabetes Care—Good HbA1c Control

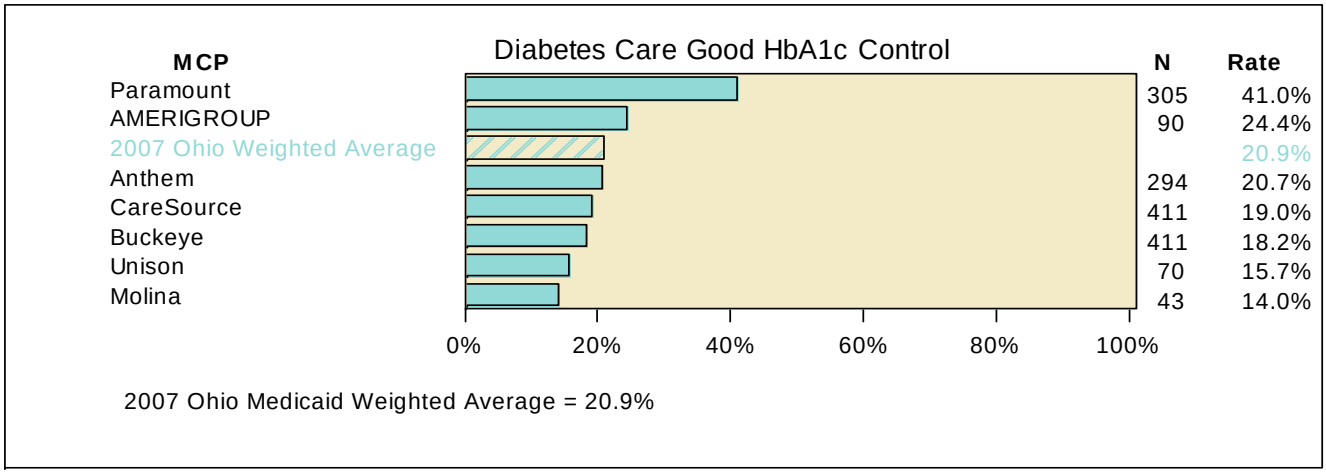


Figure 5-5 shows the MCP rankings for *Comprehensive Diabetes Care—Good HbA1c Control*. This is the first year that this indicator is being reported; therefore, national HEDIS data and previous weighted averages are not available for comparison. The 2007 Ohio's CFC Medicaid Managed Care Program weighted average was 20.9 percent. Only two MCPs performed better than the 2007 weighted average. The MCPs' rates ranged from a high of 41.0 percent to a low of 14.0 percent.

Data Collection Analysis: Comprehensive Diabetes Care—Good HbA1c Control

Figure 5-6—Data Collection Analysis:
Comprehensive Diabetes Care—Good HbA1c Control

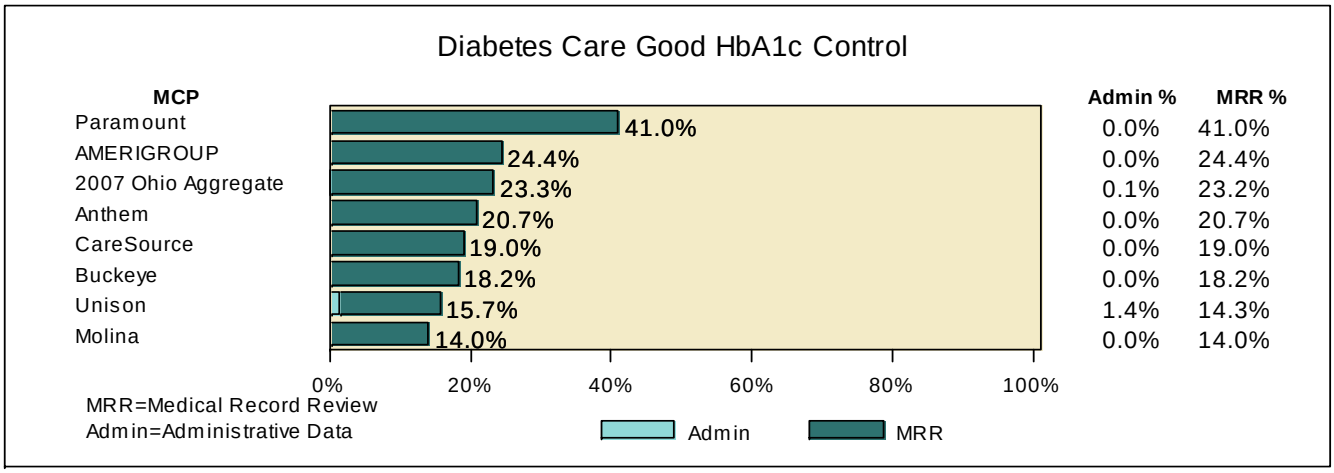


Figure 5-6 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—Good HbA1c Control*.

All seven MCPs elected to use the hybrid method to calculate this measure. However, six of the MCPs attributed all of their data collection to medical record review. The 2007 Ohio's CFC Medicaid Managed Care Program aggregate administrative rate was 0.1 percent and the medical record review rate was 23.2 percent. These results indicate that the MCPs should work directly with labs to obtain results data to reduce the burden of medical record review.

Comprehensive Diabetes Care—Eye Exam

Diabetic retinopathy occurs due to damage to blood vessels of the retina and causes 12,000 to 24,000 new cases of blindness every year.[5-6] People with diabetes are 25 to 30 times more likely to lose their vision from retinopathy, cataracts, or glaucoma than the general population.[5-7] Regular eye exams and treatment help to prevent up to 90 percent of diabetes-related blindness.[5-8] Furthermore, detecting and treating diabetic eye disease early on can decrease severe vision loss by 50 to 60 percent.[5-9] In Ohio, there are 216,861 diabetics 18 years and older who have been diagnosed with diabetic retinopathy.[5-10]

HEDIS Specification: Comprehensive Diabetes Care—Eye Exam

The *Comprehensive Diabetes Care—Eye Exam* rate reported the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and who had an eye screening for diabetic retinal diseases (that is, a retinal exam by an eye care professional), as documented through either administrative data or medical record review.

[5-6] Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2003. Available at: http://www.cdc.gov/DIABETES/pubs/pdf/ndfs_2003.pdf. Accessed on: September 19, 2007.

[5-7] Prevent Blindness America. "Diabetes and Your Eyes." Available at: http://preventblindness.org/diabetes/patcommunity/diabetes_youreyes.htm. Accessed on: September 19, 2007.

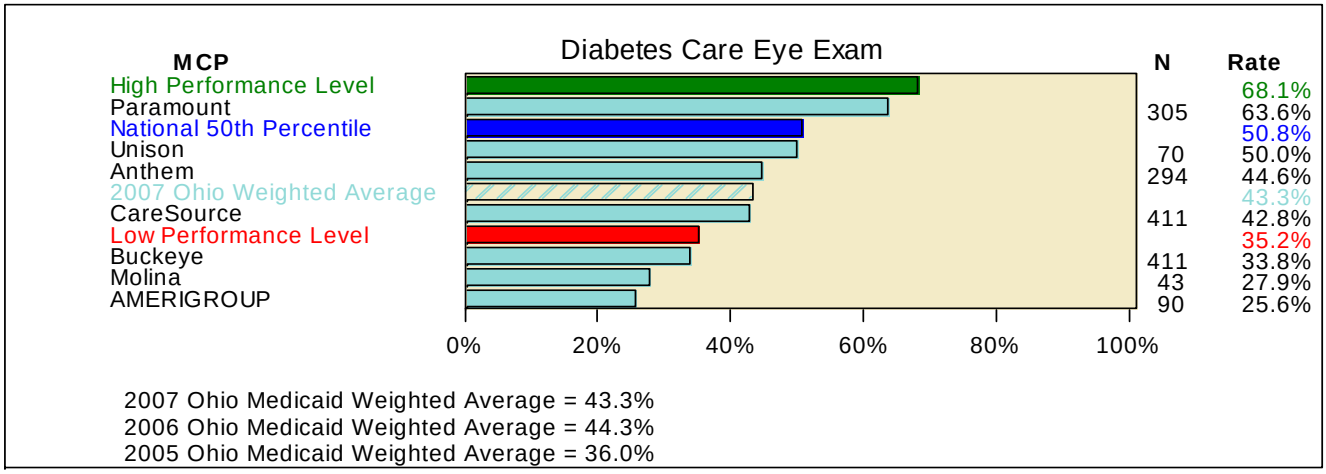
[5-8] University of Minnesota: Diabetes Institute for Immunology and Transplantation. "Blindness." February 21, 2005. Available at: http://www.diabetesinstitute.org/diabinst/learndiabetes/complications/blindness.html. Accessed on: September 19, 2007.

[5-9] Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2003. Available at: http://www.cdc.gov/DIABETES/pubs/pdf/ndfs_2003.pdf. Accessed on: September 19, 2007.

[5-10] Ohio Department of Health. Press Release: *Prevent Blindness Ohio*. November 14, 2003. Available at: http://www.preventblindness.org/Ohio/Agingeye/Diabetes1103.PDF. Accessed on: September 19, 2007.

MCP Ranking: Comprehensive Diabetes Care—Eye Exam

Figure 5-7—MCP Ranking:
Comprehensive Diabetes Care—Eye Exam



The 2007 Ohio's CFC Medicaid Managed Care Program weighted average of 43.3 percent showed a decrease from the 2006 weighted average of 44.3 percent by 1.0 percentage point and fell below the national HEDIS 2006 Medicaid 50th percentile. Three of the MCPs performed above the 2007 weighted average, and one MCP performed above the national HEDIS 2006 Medicaid 50th percentile of 50.8 percent. Three MCPs, however, performed below the LPL of 35.2 percent.

Data Collection Analysis: Comprehensive Diabetes Care—Eye Exam

Figure 5-8—Data Collection Analysis:
Comprehensive Diabetes Care—Eye Exam

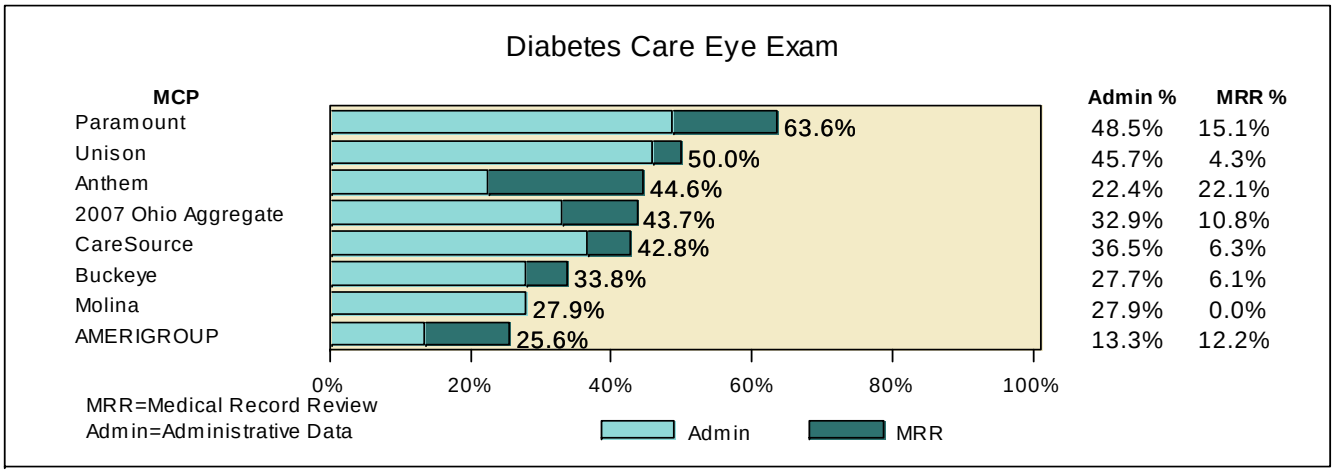


Figure 5-8 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—Eye Exam*.

All of the MCPs elected to use the hybrid method to calculate this measure. The 2007 Ohio's CFC Medicaid Managed Care Program aggregate administrative rate was 32.9 percent, and the medical record review rate was 10.8 percent. These results show that the majority of the reported rates came from administrative data for the seven MCPs, indicating relatively complete MCP vision encounter and claims data.

Comprehensive Diabetes Care—LDL-C Screening and *LDL-C Level*

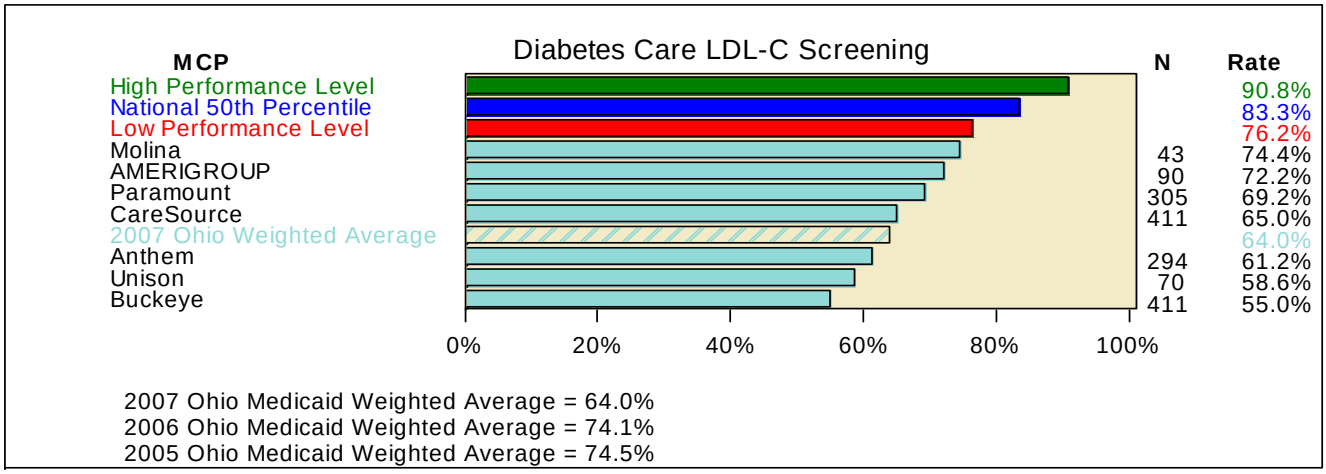
The test for low-density lipoprotein (LDL) measures the amount of LDL cholesterol in the blood. LDL is a type of lipoprotein that carries cholesterol in the blood and is considered to be undesirable (often termed "bad" cholesterol) because it deposits excess cholesterol on the walls of blood vessels and contributes to atherosclerosis (hardening of the arteries) and heart disease.[5-11]

HEDIS Specification: Comprehensive Diabetes Care—LDL-C Screening

The *Comprehensive Diabetes Care—LDL-C Screening* rate reported the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and who had an LDL-C test during the measurement year as determined by claims/encounters, automated laboratory data, or medical record review.

MCP Ranking: Comprehensive Diabetes Care—LDL-C Screening

Figure 5-9—MCP Ranking:
Comprehensive Diabetes Care—LDL-C Screening



It should be noted that changes were made to this indicator's specifications that would result in lower rates. In previous years the specifications allowed for the LDL-C screening to occur in either the measurement year or the year prior to the measurement year. In 2007, however, the specifications were changed to require that the screening take place during the measurement year. Therefore, these rates are not directly comparable to previous years' rates or national benchmarks; however, the rates are displayed for informational purposes.

[5-11] Kramer RJ and Prewitt K. Cholesterol Blood Test. iVillage Total Health. Review date: August 18, 2004. Available at: http://heart.health.ivillage.com/cholesterol/cholesterolbloodtest.cfm. Accessed on: July 9, 2007.

Data Collection Analysis: Comprehensive Diabetes Care—LDL-C Screening

Figure 5-10—Data Collection Analysis:
Comprehensive Diabetes Care—LDL-C Screening

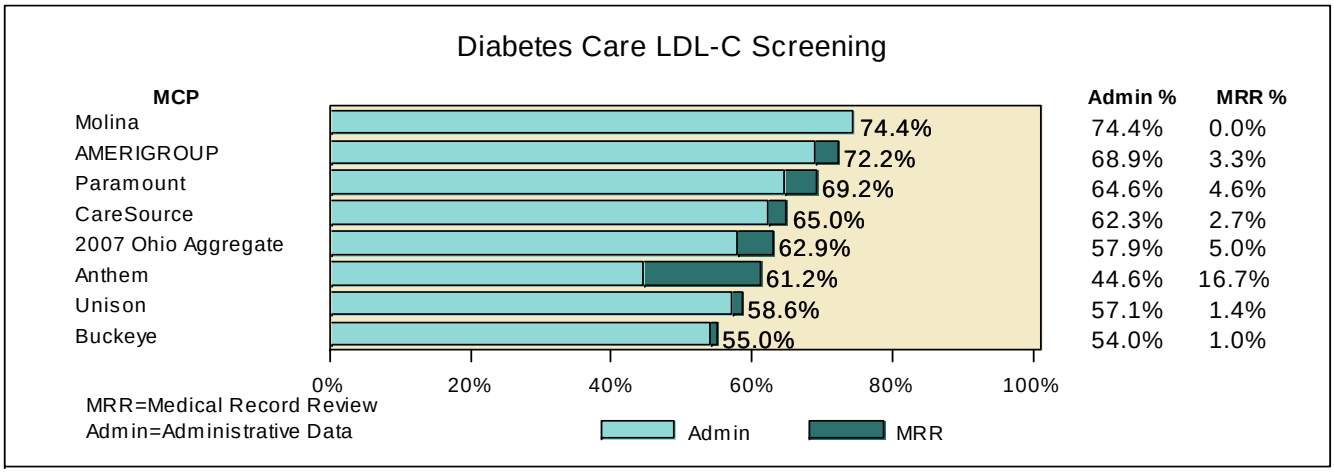


Figure 5-10 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—LDL-C Screening*.

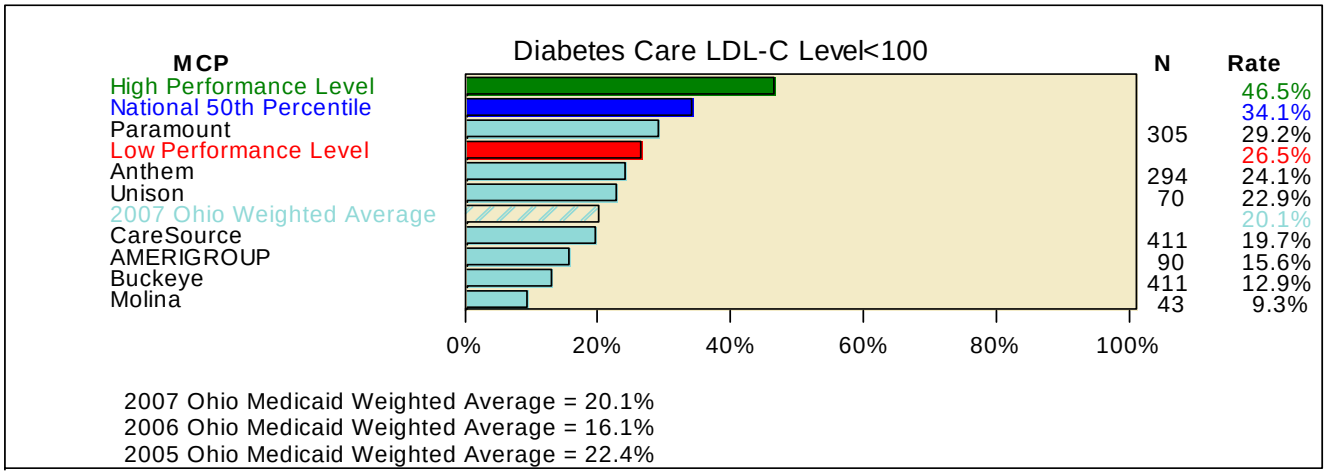
All of the MCPs elected to use the hybrid method to calculate this measure. The 2007 Ohio's CFC Medicaid Managed Care Program's aggregate administrative rate was 57.9 percent, and the medical record review rate was 5.0 percent. The high administrative rate indicates that the MCPs have relatively complete lab encounter and claims data.

HEDIS Specification: Comprehensive Diabetes Care—LDL-C Level <100

The rate for *Comprehensive Diabetes Care—LDL-C Level <100* calculated the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and whose most recent LDL-C test (performed during the measurement year) indicated an LDL-C level of less than 100 mg/dL, as documented through automated laboratory data and/or medical record review.

MCP Ranking: Comprehensive Diabetes Care—LDL-C Level <100

Figure 5-11—MCP Ranking:
Comprehensive Diabetes Care—LDL-C Level <100



It should be noted that changes were made to this indicator's specifications. In previous years the specifications allowed for the LDL-C screening to occur in either the measurement year or the year prior to the measurement year. In 2007, however, the specifications were changed to require that the screening take place during the measurement year. Therefore, these rates are not directly comparable to previous years' rates or national benchmarks; however, the rates are displayed for informational purposes.

Data Collection Analysis: Comprehensive Diabetes Care—LDL-C Level <100

Figure 5-12—Data Collection Analysis:
Comprehensive Diabetes Care—LDL-C Level <100

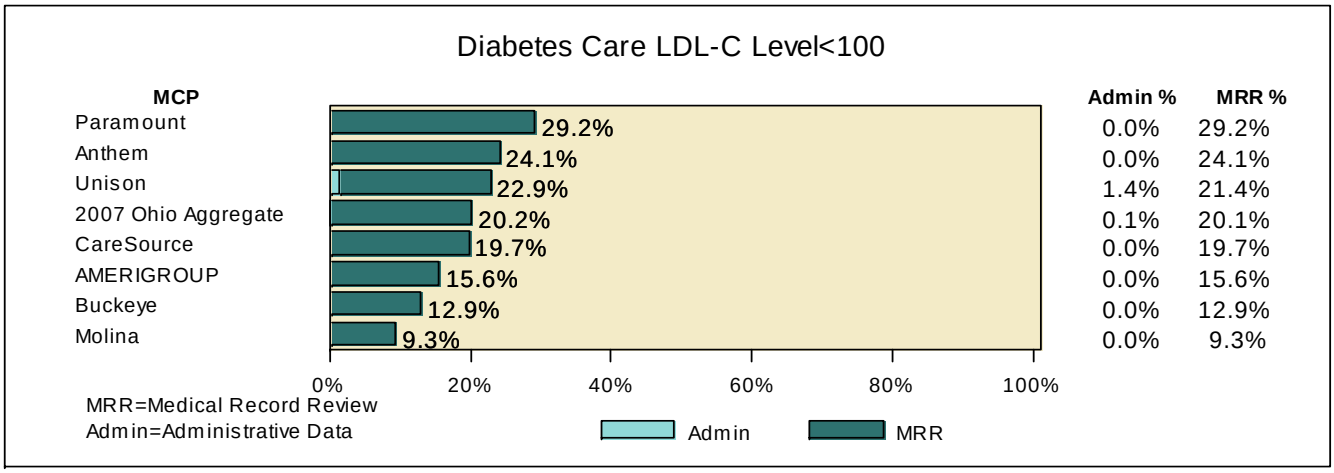


Figure 5-12 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—LDL-C Level <100*.

All of the MCPs elected to use the hybrid method to calculate this measure. The 2007 aggregate administrative rate was 0.1 percent, and the medical record review rate was 20.1 percent. These results show that a majority of the reported rates came from medical record review, indicating the MCPs are not receiving lab results from administrative data. Therefore, the MCPs should investigate ways to obtain lab results data directly from their contracted labs.

Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy

Diabetic nephropathy is a progressive disease of the kidneys that takes years to develop. Approximately 20 to 30 percent of diabetics suffer from nephropathy.[5-12] Diabetes is a major cause of kidney disease and the leading cause of end-stage renal disease (ESRD), a condition for which the patient requires dialysis or a kidney transplant to live. Diabetes accounts for 45 percent of newly diagnosed kidney failure.[5-13] About 150,000 Americans have kidney failure as a direct result of diabetes.[5-14]

HEDIS Specification: Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy

The *Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy* rate is intended to assess whether diabetic patients are being monitored for nephropathy. Diabetic nephropathy is a complication of diabetes characterized by the kidney losing its ability to function properly. The rate reported the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and who were screened for nephropathy, or received treatment for nephropathy, as documented through either administrative data or medical record review. The rate included patients who have been screened for nephropathy or who already have evidence of nephropathy, as demonstrated by medical attention for nephropathy, a positive microalbuminuria test, or evidence of angiotensin converting enzyme (ACE) inhibitor/angiotensin receptor blocker (ARB) therapy.

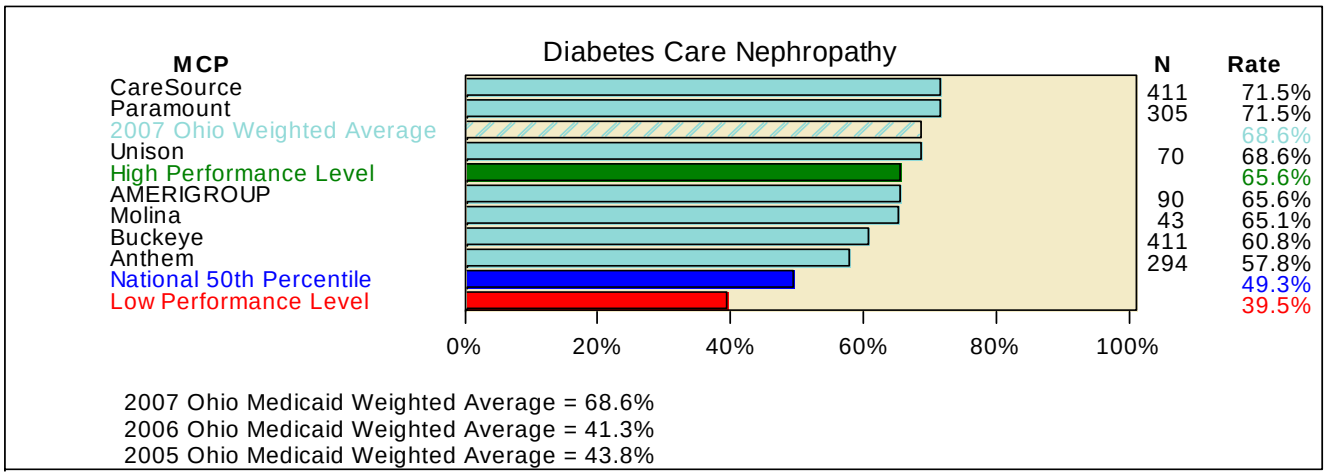
[5-12] Thorp, ML. "Diabetic Nephropathy: Common Questions." *American Family Physician*. 2005;72: 96-99,100. Available at: http://www.aafp.org/afp/20050701/96.html. Accessed on: July 9, 2007.

[5-13] National Committee for Quality Assurance. *The State of Managed Care Quality, 2006*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:32.

[5-14] National Kidney and Urologic Diseases Information Clearinghouse. *Kidney Disease of Diabetes.* Available at: http://kidney.niddk.nih.gov/kudiseases/pubs/kdd/index.htm. Accessed on: July 9, 2007.

MCP Ranking: Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy

Figure 5-13—MCP Ranking:
Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy



It should be noted that changes were made to this indicator's specifications that would result in higher rates. In 2007, the specifications were amended to include the use of ACE and ARBs for numerator compliance for this indicator. Therefore, these rates are not directly comparable to previous years' rates or national benchmarks and are displayed for informational purposes only.

Data Collection Analysis: Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy

Figure 5-14—Data Collection Analysis:
Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy

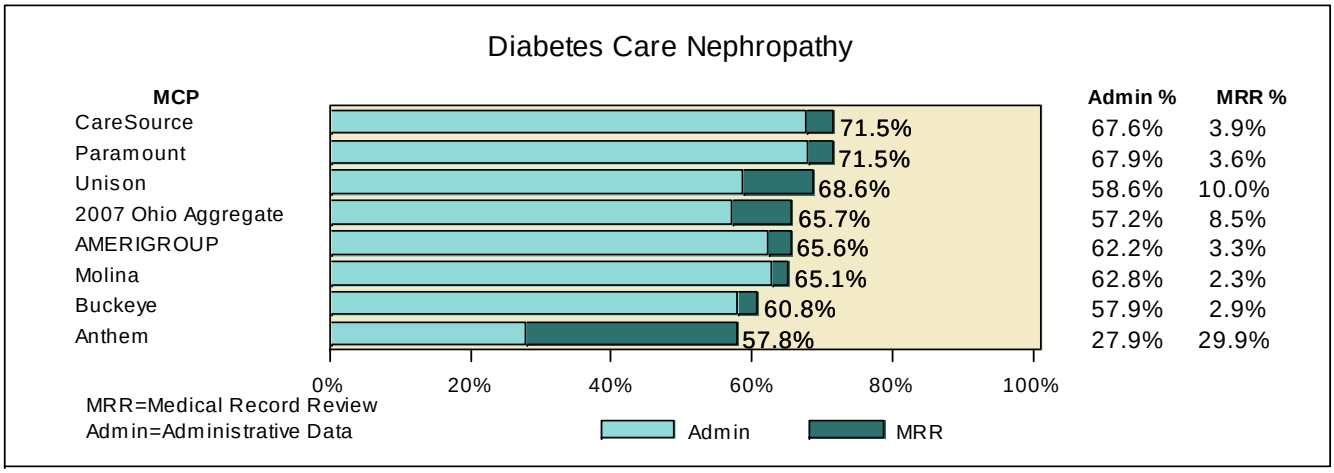


Figure 5-14 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy*.

All of the MCPs elected to use the hybrid method to calculate this measure. The 2007 Ohio's CFC Medicaid Managed Care Program's aggregate administrative rate was 57.2 percent, and the medical record review rate was 8.5 percent. These results indicate that numerator-compliant events for *Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy* were identified mostly through administrative data.

Comprehensive Diabetes Care—Blood Pressure Levels

Approximately 73 percent of diabetics have high blood pressure or are required to take prescription drugs for hypertension. The ability to control blood pressure in diabetics can reduce some of the complications that are prone to diabetics. For example, the risk of cardiovascular disease is reduced by 33 percent to 50 percent, and the risk of microvascular complications (i.e., eye, kidney, and nerve diseases) is reduced by 33 percent. In addition, for every 10 mm Hg that systolic blood pressure is reduced, diabetic complications are reduced by 12 percent.[5-15]

HEDIS Specification: Comprehensive Diabetes Care—Blood Pressure Level <130/80

The *Comprehensive Diabetes Care—Blood Pressure Level <130/80* rate is intended to assess whether diabetic patients are controlling their blood pressure. The rate reported the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and whose most recent blood pressure reading was less than 130/80, as documented through either administrative data or medical record review. If there was no blood pressure reading during the measurement year, the member was not compliant.

[5-15] American Diabetes Association. "Complications of Diabetes in the United States." Available at: http://www.diabetes.org/diabetes-statistics/complications.jsp. Accessed on: July 9, 2007.

MCP Ranking: Comprehensive Diabetes Care—Blood Pressure Level <130/80

Figure 5-15—MCP Ranking:
Comprehensive Diabetes Care—Blood Pressure Level <130/80

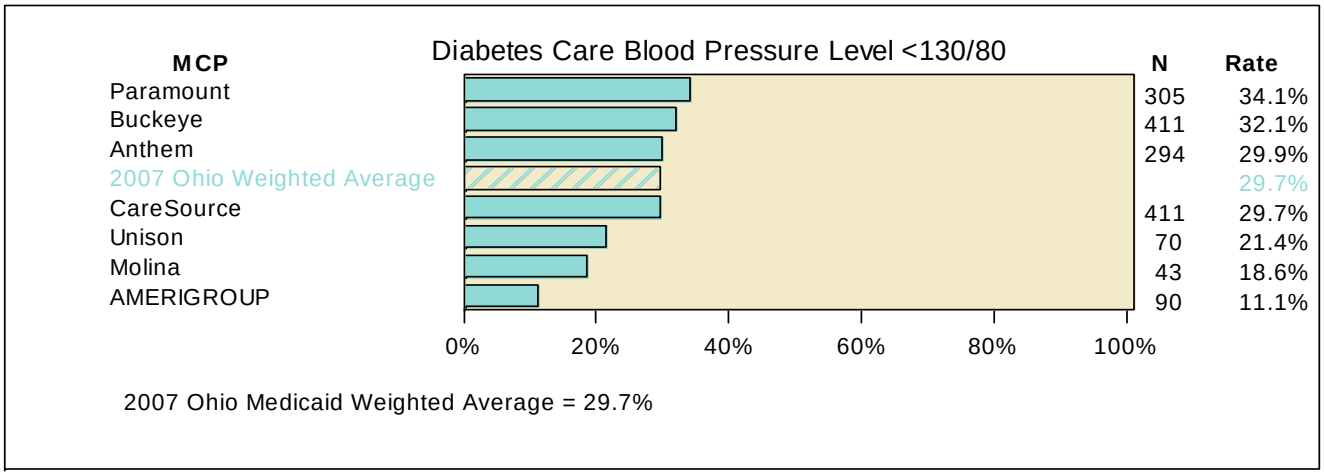


Figure 5-15 shows the MCP ranking for C*omprehensive Diabetes Care—Blood Pressure Level <130/80*. This is the first year this indicator is being reported; therefore, national HEDIS data and previous weighted averages are not available for comparison. The MCPs' reported rates ranged from a low of 11.1 percent to a high of 34.1 percent. Three of the MCPs performed above the 2007 weighted average of 29.7 percent.

Data Collection Analysis: Comprehensive Diabetes Care—Blood Pressure Level <130/80

Figure 5-16—Data Collection Analysis:
Comprehensive Diabetes Care—Blood Pressure Level <130/80

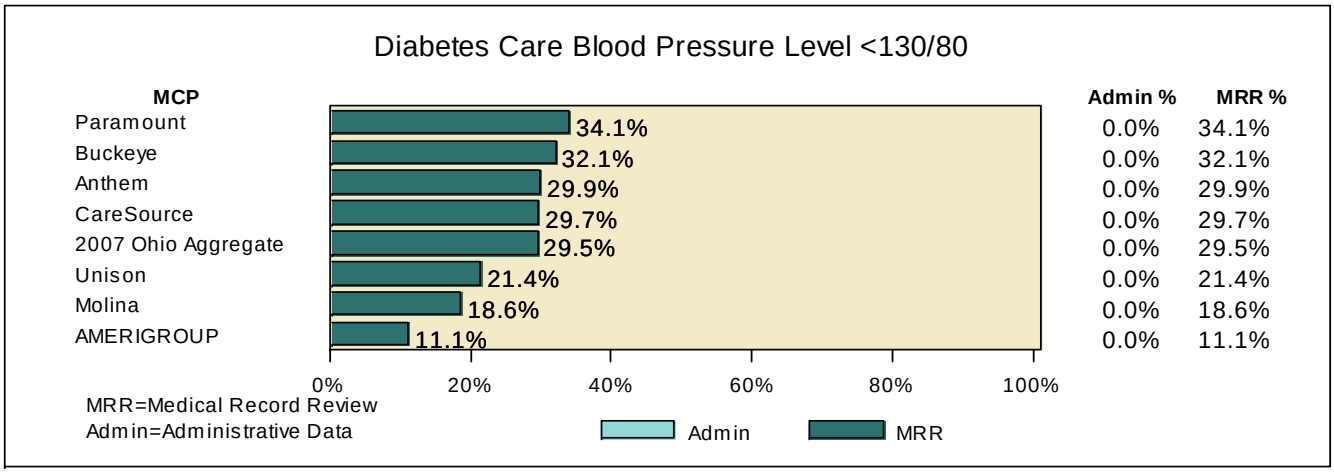


Figure 5-16 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—Blood Pressure Level <130/80*.

All of the MCPs elected to use the hybrid method to calculate this measure and all of the MCPs used medical record review to collect the data for this measure. This is an expected result since medical record review is typically the primary way to obtain blood pressure results. The 2007 Ohio's CFC Medicaid Managed Care Program's medical record review rate was 29.5 percent.

HEDIS Specification: Comprehensive Diabetes Care—Blood Pressure Level <140/90

The *Comprehensive Diabetes Care—Blood Pressure Level <140/90* rate is intended to assess whether diabetic patients are controlling their blood pressure. The rate reported the percentage of members with diabetes (Type 1 and Type 2), 18 to 75 years of age, who were continuously enrolled during the measurement year and whose most recent blood pressure reading was less than 140/90, as documented through either administrative data or medical record review. If there was no blood pressure reading during the measurement year, the member was not compliant.

MCP Ranking: Comprehensive Diabetes Care—Blood Pressure Level <140/90

Figure 5-17—MCP Ranking:
Comprehensive Diabetes Care—Blood Pressure Level <140/90

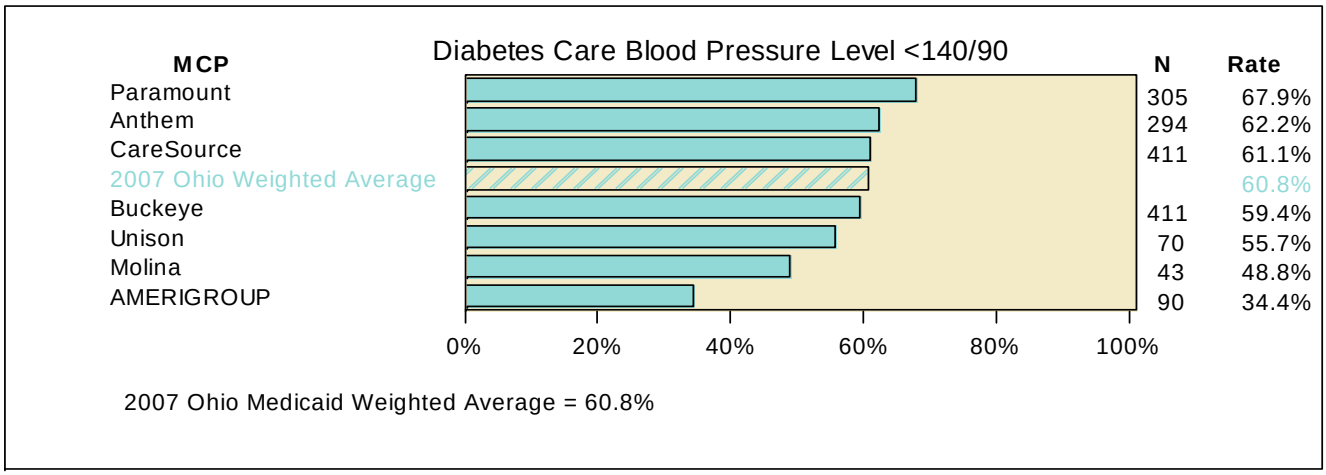


Figure 5-17 shows the MCP ranking for *Comprehensive Diabetes Care—Blood Pressure Level <140/90*. This is the first year this indicator is being reported; therefore, national HEDIS data and previous weighted averages are not available for comparison. The MCPs' reported rates ranged from a low of 34.4 percent to a high of 67.9 percent. Three of the MCPs performed above the 2007 weighted average of 60.8 percent.

Data Collection Analysis: Comprehensive Diabetes Care—Blood Pressure Level <140/90

Figure 5-18—Data Collection Analysis:
Comprehensive Diabetes Care—Blood Pressure Level <140/90

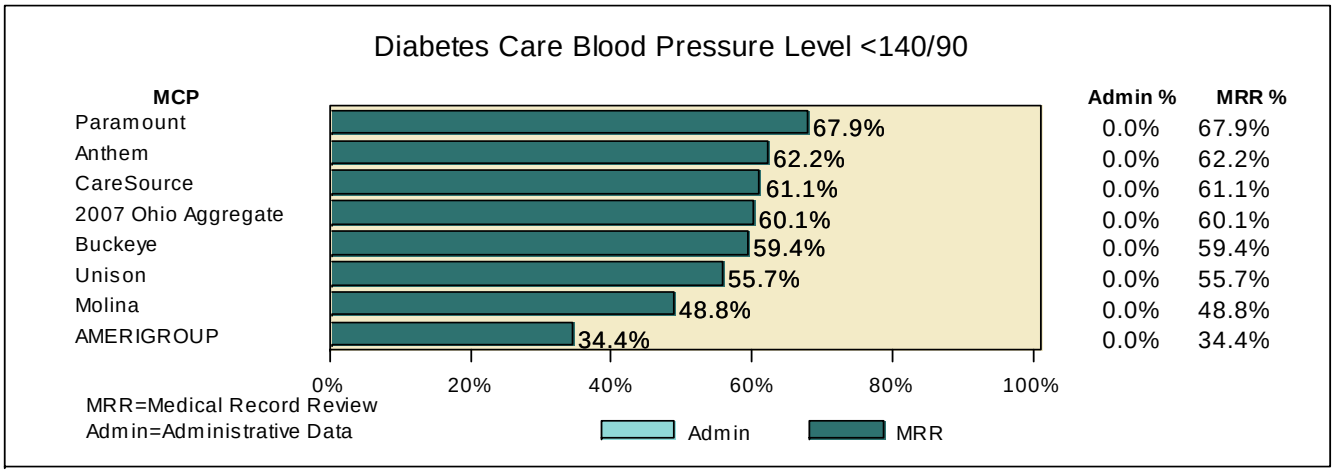


Figure 5-18 shows the breakout of rates that were derived from administrative data and medical record review for *Comprehensive Diabetes Care—Blood Pressure Level <140/90*.

All of the MCPs elected to use the hybrid method to calculate this measure and all of the MCPs used medical record review to collect the data for this measure. This is an expected result since medical record review is typically the primary way to obtain blood pressure results. The 2007 Ohio's CFC Medicaid Managed Care Program's aggregate medical record review rate was 60.1 percent.

Comprehensive Diabetes Care Trending

Table 5-1—Trending Results by MCP:
Comprehensive Diabetes Care—HbA1c Testing

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7569	AMERIGROUP	- -	- -	76.7%	- -	NA
7490	Anthem	- -	- -	72.8%	- -	NA
6855	Buckeye	63.8%	56.9%	61.8%	4.9%	↔
6706	CareSource	73.0%	68.4%	72.7%	4.4%	↔
7472	Molina	- -	- -	74.4%	- -	NA
7339	Paramount	81.9%	74.6%	76.7%	2.2%	↔
7479	Unison	- -	- -	74.3%	- -	NA
	Medicaid Weighted Averages	74.4%	67.9%	72.0%	4.1%	↔
	National HEDIS Medicaid 50th Percentile	77.6%	78.4%	77.4%	- -	- -

Table 5-1 presents the *Comprehensive Diabetes Care—HbA1c Testing* trending results for the MCPs and Ohio's CFC Medicaid Managed Care Program weighted average. All three of the rates for the MCPs that reported rates last year and Ohio's CFC Medicaid Managed Care Program's weighted average increased; however, none increased by more than 10 percentage points.

Table 5-2—Trending Results by MCP:
Comprehensive Diabetes Care—Poor HbA1c Control

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7569	AMERIGROUP	- -	- -	66.7%	- -	NA
7490	Anthem	- -	- -	58.5%	- -	NA
6855	Buckeye	100.0%	74.0%	72.3%	-1.8%	↔
6706	CareSource	58.6%	67.9%	61.6%	-6.3%	↔
7472	Molina	- -	- -	67.4%	- -	NA
7339	Paramount	46.6%	52.6%	39.7%	-13.0%	▲
7479	Unison	- -	- -	62.9%	- -	NA
	Medicaid Weighted Averages	58.0%	69.3%	60.8%	-8.5%	↔
	National HEDIS Medicaid 50th Percentile	47.4%	47.5%	45.2%	- -	- -

Note: For this measure, a lower rate and a negative value in the "Difference" column indicates better performance (i.e., low rates of *Poor HbA1c Control* indicate better care). Improvement in the trend is indicated by an "Up" finding in the trend column, and a decline in performance is indicated by a "Down" finding.

Table 5-2 presents the *Comprehensive Diabetes Care—Poor HbA1c Control* trending results for the MCPs and Ohio's CFC Medicaid Managed Care Program's weighted average. One MCP had a decrease of more than 10 percentage points, indicating positive change. The rates of the other two MCPs that reported rates last year and the statewide weighted average also decreased, but by less than 10 percentage points.

Table 5-3—Trending Results by MCP:
Comprehensive Diabetes Care—Eye Exam

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7569	AMERIGROUP	- -	- -	25.6%	- -	NA
7490	Anthem	- -	- -	44.6%	- -	NA
6855	Buckeye	18.1%	31.9%	33.8%	2.0%	↔
6706	CareSource	35.3%	46.5%	42.8%	-3.6%	↔
7472	Molina	- -	- -	27.9%	- -	NA
7339	Paramount	48.5%	52.2%	63.6%	11.4%	↑
7479	Unison	- -	- -	50.0%	- -	NA
	Medicaid Weighted Averages	36.0%	44.3%	43.3%	-1.0%	↔
	National HEDIS Medicaid 50th Percentile	46.5%	46.9%	50.8%	- -	- -

Table 5-3 presents the *Comprehensive Diabetes Care—Eye Exam* trending results for the MCPs and Ohio's CFC Medicaid Managed Care Program's weighted average. One of the MCPs had an increase of greater than 10 percentage points from 2006 to 2007, indicating substantial improvement in *Eye Exam* rates. The other MCPs and the weighted average did not have any increases or decreases greater than 10 percentage points from 2006 to 2007.

Table 5-4—Trending Results by MCP:
Comprehensive Diabetes Care—LDL-C Screening

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7569	AMERIGROUP	- -	- -	72.2%	- -	NA
7490	Anthem	- -	- -	61.2%	- -	NA
6855	Buckeye	50.8%	66.2%	55.0%	-11.2%	↓
6706	CareSource	74.7%	74.5%	65.0%	-9.5%	↔
7472	Molina	- -	- -	74.4%	- -	NA
7339	Paramount	86.3%	84.2%	69.2%	-15.0%	↓
7479	Unison	- -	- -	58.6%	- -	NA
	Medicaid Weighted Averages	74.5%	74.1%	64.0%	-10.1%	↓
	National HEDIS Medicaid 50th Percentile	77.5%	81.4%	83.3%	- -	- -

It should be noted that changes were made to this indicator's specifications that would result in lower rates. In previous years the specifications allowed for the LDL-C screening to occur in either the measurement year or the year prior to the measurement year. In 2007, however, the specifications were changed to require that the screening take place during the measurement year. Therefore, these rates are not directly comparable to previous years' rates or national benchmarks; however, the rates are displayed for informational purposes.

Table 5-5—Trending Results by MCP:
Comprehensive Diabetes Care—LDL-C Level <100

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7569	AMERIGROUP	- -	- -	15.6%	- -	NA
7490	Anthem	- -	- -	24.1%	- -	NA
6855	Buckeye	0.0%	11.8%	12.9%	1.1%	↔
6706	CareSource	22.1%	16.5%	19.7%	3.2%	↔
7472	Molina	- -	- -	9.3%	- -	NA
7339	Paramount	25.5%	28.9%	29.2%	0.2%	↔
7479	Unison	- -	- -	22.9%	- -	NA
	Medicaid Weighted Averages	22.4%	16.1%	20.1%	3.9%	↔
	National HEDIS Medicaid 50th Percentile	28.6%	31.7%	34.1%	- -	- -

It should be noted that changes were made to this indicator's specifications. In previous years the specifications allowed for the LDL-C screening to occur in either the measurement year or the year prior to the measurement year. In 2007, however, the specifications were changed to require that the screening take place during the measurement year. Therefore, these rates are not directly comparable to previous years' rates or national benchmarks; however, the rates are displayed for informational purposes.

Table 5-6—Trending Results by MCP:
Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy

IDSS	MCP	2005	2006	2007	Difference	2006 – 2007 MCP Trend
7569	AMERIGROUP	- -	- -	65.6%	- -	NA
7490	Anthem	- -	- -	57.8%	- -	NA
6855	Buckeye	37.3%	31.4%	60.8%	29.5%	↑
6706	CareSource	41.4%	41.4%	71.5%	30.2%	↑
7472	Molina	- -	- -	65.1%	- -	NA
7339	Paramount	59.8%	53.1%	71.5%	18.4%	↑
7479	Unison	- -	- -	68.6%	- -	NA
	Medicaid Weighted Averages	43.8%	41.3%	68.6%	27.3%	↑
	National HEDIS Medicaid 50th Percentile	43.8%	46.5%	49.3%	- -	- -

It should be noted that changes were made to this indicator's specifications that would result in higher rates. In 2007, the specifications were amended to include the use of ACE and ARBs for numerator compliance for this indicator. Therefore, these rates are not directly comparable to previous years' rates or national benchmarks and are displayed for informational purposes only.

Diabetes Findings and Recommendations

The key findings indicate that:

- The 2007 Ohio's CFC Medicaid Managed Care Program's weighted averages for the three comparable measures reported for *Comprehensive Diabetes Care* were lower than the national HEDIS 2006 Medicaid 50th percentiles.
- Two of the three comparable measures' (except *Eye Exam*) 2007 Ohio's CFC Medicaid Managed Care Program's weighted averages increased from the 2006 Ohio's CFC Medicaid Managed Care Program's weighted averages. The weighted average for *Poor HbA1c Control* decreased, representing improvement.
- The 2007 Ohio's CFC Medicaid Managed Care Program's weighted average for *Poor HbA1c Control* was below the LPL.

Overall, the MCPs' performance improved from 2006 to 2007. Most MCPs that reported HEDIS measures previously increased their rates for the comparable measures, except for *Eye Exam* (one MCP's rate decreased). This shift is positive for MCP performance since there was an overall decline from 2005 to 2006.

The MCPs should consider implementing established quality improvement interventions as a guide to improving diabetes rates. The following list contains examples of some interventions:

- Provide reminders for diabetes services to providers and members through newsletters, postcards, birthday cards, phone calls, and management tools.
- Educate providers on diabetes health guidelines and publish guidelines in multiple sources such as on an MCP's Web site.
- Create a diabetes and/or case management registry to access information such as laboratory screening and results data, most recent blood pressure results, etc.
- Provide incentives to providers with diabetic members who receive required labs, exams, and screenings.
- Provide incentives to providers who meet performance thresholds on HEDIS measures.
- Educate/alert physicians with patients who are not receiving recommended services.
- Secure contracted lab vendors for enhanced lab data.
- Provide member incentives for obtaining necessary diabetic services.
- Conduct a medical record review to identify members who are in need of services.

Finally, in the future, ODJFS may want to consider using the cost of care HEDIS indicators that are pertinent to diabetes. The *Relative Resource Use for People with Diabetes* measure provides more information about the efficiency or value of service rendered by the health plan. The relative resource measures focus on high-cost conditions, differentiate between unit price and utilization variation, and rely on a transparent risk-adjustment methodology. This measure uses standard cost to evaluate cost of care for patients in the *Comprehensive Diabetes Care* denominator. A comparison of observed services and standard costs to expected values is also conducted.

Audit Findings

When examining the HEDIS rates listed in this report and making comparisons among the MCPs across the State and to national percentiles, it is important to recognize the data collection and reporting issues that the MCPs confront. If issues are identified, they may impact a given rate. Due to the fact that HEDIS data depends on the quality of the MCPs' information systems, auditors measure how the MCPs collect, store, analyze, and report medical, service, member, practitioner, and vendor data. MCPs without sufficient capabilities in any of these areas cannot accurately report HEDIS information. The auditors evaluated an MCP's information system (IS) standards as defined by NCQA. The standards specify the minimum requirements that an MCP's information systems should meet to ensure that there are effective IS practices and control procedures in place for adequate HEDIS reporting. The following identifies the IS standards:

- IS 1.0 Sound Coding Methods for Medical Data
- IS 2.0 Data Capture, Transfer, and Entry—Medical and Service Data
- IS 3.0 Data Capture, Transfer, and Entry—Membership Data
- IS 4.0 Data Capture, Transfer, and Entry—Practitioner Data
- IS 5.0 Data Integration Required to Meet the Demands of Accurate HEDIS Reporting
- IS 6.0 Control Procedures That Support HEDIS Reporting Integrity

For a detailed description of each of the IS standards, please refer to Appendix B.

Each of the MCPs used an NCQA-Certified HEDIS Licensed Organization (LO) to perform the audit. Use of an LO ensured that all MCPs were evaluated similarly according to NCQA specifications and that all of the MCPs submitted audited data. Some MCPs had other product lines besides Medicaid audited by the LO. In addition, six of the seven MCPs used a HEDIS-certified software vendor. The scope of the audit varied among the MCPs, depending on whether all HEDIS measures were subject to review.

All of the MCPs achieved *Report* status as the final audit finding for the State-selected HEDIS measures, indicating that there were no issues related to the information systems capabilities that could severely impact HEDIS results. These findings demonstrated that the MCPs that reported data in 2006 continue to have acceptable HEDIS reporting capabilities that were seen in last year's HEDIS reporting.

Recommendations for the Ohio Department of Job and Family Services

In the fourth year of reviewing and reporting on Ohio's CFC Medicaid Managed Care Program HEDIS audit findings, the IS capabilities pertaining to accurate and valid HEDIS reporting have continued to improve. Overall, the assessment for 2007 resulted in no audit issues. Sound practices by the MCPs have led to another year of reportable, audited rates.

Improvement in data completeness was evident due to the increases in administrative data collection rates. Although the MCPs have shown improvement in data completeness, the level of data collection that relies on medical record review is still high, suggesting that there is still room to improve. The MCPs need to focus on alternate administrative data sources to help augment their administrative data. ODJFS should assist the MCPs, perhaps through a group forum, to determine data sources that can be used and strategies for obtaining data from these sources.

Due to the retirement of the *Adolescent Immunization Status* measure, ODJFS should consider adding a new measure. When considering adding a new measure, HSAG recommends that ODJFS consult with the MCPs on the capability to collect the necessary data and determine together whether the measure adds value to the State's overall quality improvement strategy. Wherever possible, administrative measures that are less labor-intensive and costly to produce should be considered. However, if ODJFS elects to have the MCPs report an administrative-only measure, it is important to determine that the MCPs' claims/encounter data are complete and that their information systems capabilities are sufficient to support collection of the necessary data components. The characteristics of the MCPs' information systems will determine the ability to report complex performance measures. For example, if several of the MCPs have poor claims/encounter data processing systems, it would not be advantageous to recommend performance measures that rely heavily on administrative data. Measures that could be considered include:

- *Appropriate Treatment for Children With Upper Respiratory Infection*
- *Appropriate Testing for Children With Pharyngitis*
- *Lead Screening in Children*
- *Breast Cancer Screening*
- *Use of Appropriate Medications for People With Asthm*a
- *Children and Adolescents' Access to Primary Care Practitioners*

Appendix A. National HEDIS 2006 Medicaid Percentiles

Table A-1—National HEDIS 2006 Medicaid Percentiles

Measure	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
Childhood Immunization Status—Combination #2	53.8%	62.7%	72.4%	78.5%	82.7%
Childhood Immunization Status—Combination #3	25.1%	33.8%	42.3%	49.8%	57.8%
Adolescent Immunization Status—Combination #2	13.7%	24.6%	44.3%	58.2%	69.8%
Comprehensive Diabetes Care—HbA1c Testing	64.0%	71.1%	77.4%	84.9%	88.8%
*Comprehensive Diabetes Care—Poor HbA1c Control**	30.3%	37.3%	45.2%	60.1%	74.3%
Comprehensive Diabetes Care—Eye Exam	25.5%	35.2%	50.8%	61.5%	68.1%
Comprehensive Diabetes Care—LDL-C Screening	66.3%	76.2%	83.3%	88.1%	90.8%
Comprehensive Diabetes Care—LDL-C Level <100 mg/dL	14.4%	26.5%	34.1%	41.0%	46.5%
Comprehensive Diabetes Care—Medical Attention for Diabetic Nephropathy	30.2%	39.5%	49.3%	59.7%	65.6%

* For this measure only, a *lower* rate indicates better performance. The 10th percentile (rather than the 90th percentile) shows excellent performance and represents the HPL. The 75th percentile (rather than the 25th percentile) shows below-average performance and represents the LPL.

Source: HEDIS® Compliance Audit™: Standards, Policies, and Procedures, Volume 5.

IS 1.0 Sound Coding Methods for Medical Data

- **IS 1.1 Industry standard codes (ICD-9-CM, CPT, DRG, HCPCS) are used consistently and all characters are collected and captured.**
- **IS 1.2 Principal codes are identified and secondary codes are captured. Nonstandard coding schemes are fully documented and mapped back to industry standard codes.**

Rationale

The managed care plan (MCP) must capture all clinical information pertinent to the delivery of services to provide a basis for calculating HEDIS measures. The audit process ensures that the MCP consistently captures sufficient clinical information. Principal among these practices and critical for computing HEDIS clinical measures is consistent use of standardized codes to describe medical events, including nationally recognized schemes to capture diagnosis, procedure, DRG, and DSM codes. Standardized coding improves the comparability of HEDIS measures through common definition of identical clinical events. The MCP must cross-reference nonstandard coding schemes at the specific diagnosis and service level to attain equivalent meaning.

IS 2.0 Data Capture, Transfer, and Entry—Medical Data

- **IS 2.1 Standard submission forms are routinely used and capture all fields relevant to HEDIS reporting. All proprietary forms capture equivalent data.**
- **IS 2.2 Data receipt and entry processes are effective and efficient and ensure timely, accurate, and complete input to HEDIS reporting.**
- **IS 2.3 Electronic transmission procedures conform to industry standards and have necessary checking procedures to ensure data accuracy (logs, counts, receipts, hand-off, and sign-off).**
- **IS 2.4 Abstracting data from medical records is reliably and accurately performed.**
- **IS 2.5 The MCP assesses data completeness continually and takes steps to improve its performance.**

Rationale

The integrity of HEDIS measures requires using standard forms, controlling receipt processes, editing and verifying data entry, and implementing other control procedures that promote completeness and accuracy in receiving and recording medical information. The transfer of information from medical charts into the MCP's databases should be subject to the same standards for accuracy and completeness.

IS 3.0 Data Capture, Transfer, and Entry—Membership Data

- **IS 3.1 The MCP has procedures for submitting HEDIS-relevant information for data entry and for ensuring accurate, complete, and timely entry of membership data.**
- **IS 3.2 Data entry processes are effective, efficient, timely and include sufficient edit checks to ensure accurate entry of submitted data in transaction files.**
- **IS 3.3 Electronic transmissions of membership data have necessary procedures to ensure accuracy.**

Rationale

Controlling receipt processes, editing and verifying data entry, and implementing other control procedures promote completeness and accuracy in receiving and recording member information and are critical to databases that calculate HEDIS measures. Specific member information includes age, gender, benefits, product line (commercial, Medicaid, and Medicare), and the dates that define periods of membership so gaps in enrollment can be determined.

IS 4.0 Data Capture, Transfer, and Entry—Practitioner Data

- **IS 4.1 The MCP has effective procedures for submitting HEDIS-relevant information and for ensuring accurate, complete, and timely entry of practitioner data.**
- **IS 4.2 Data entry processes are effective, efficient, timely and include edit checks to ensure accurate entry of submitted data in transaction files.**
- **IS 4.3 Electronic transmissions of practitioner data have checking procedures to ensure accuracy.**

Rationale

Controlling receipt processes, editing and verifying data entry, and implementing other control procedures promote completeness and accuracy in receiving and recording practitioner information and are critical to databases that calculate HEDIS measures. Specific practitioner information includes specialty, contracts, credentials, populations served, dates of a practitioner's inclusion in the network, date of credentialing, and information needed to develop medical record abstraction tools.

IS 5.0 Data Integration Required to Meet the Demands of Accurate HEDIS Reporting

- **IS 5.1 Data transfers to HEDIS repository from transaction files are accurate.**
- **IS 5.2 File consolidations, extracts, and derivations are accurate.**
- **IS 5.3 Repository structure and formatting are suitable for HEDIS measures and enable required programming efforts.**

Rationale

Calculating HEDIS measures requires data from a number of different sources. The systems used to assemble the data and to make the required calculations should be carefully constructed and tested.

IS 6.0 Control Procedures With Support of HEDIS Reporting Integrity

- **IS 6.1 Report production is managed effectively and operators perform appropriately.**
- **IS 6.2 HEDIS reporting software is managed properly with regard to development, methodology, documentation, revision control, and testing.**
- **IS 6.3 Physical control procedures ensure HEDIS data integrity, such as physical security, data access authorization, disaster recovery facilities, and fire protection.**

Rationale

The MCP's quality assurance practices and backup procedures serve as an organizational infrastructure supporting all MCP information systems. The practices and procedures promote accurate and timely information processing and data protection in the event of a disaster. Data needed to calculate HEDIS measures are produced by the MCP's information systems and may be directly or indirectly affected by information system practices and procedures.

Administrative Data

Any automated data within an MCP (e.g., claims/encounter data, member data, provider data, hospital billing data, pharmacy data, and laboratory data).

Administrative Method

The administrative method requires MCPs to identify the eligible population (i.e., the denominator) using administrative data. In addition, the numerator(s), or services provided to the members who are in the eligible population, are solely derived from administrative data. Medical records cannot be used to retrieve information. When using the administrative method the entire eligible population becomes the denominator, and sampling is not allowed.

The administrative method is cost-efficient but can produce lower rates due to incomplete data submission by capitated providers. For example, an MCP has 10,000 members who qualify for the *Comprehensive Diabetes Care* measure. The MCP chooses to perform the administrative method and finds that only 4,000 members out of the 10,000 had evidence of an eye exam. The final rate for this measure, using the administrative method, would be 4,000/10,000, or 40 percent.

Audit Result

The auditor's final determination, based on audit findings, of the appropriateness of the MCP publicly reporting its HEDIS measure rates. Each measure included in the HEDIS audit receives either a *Report*, *Not Applicable*, *No Benefit*, or *Not Report* audit finding.

Baseline Assessment Tool (BAT) Review

The BAT, completed by each MCP undergoing the HEDIS audit process, provides information to auditors regarding the MCP's systems for collecting and processing data for HEDIS reporting. Auditors review the BAT prior to the scheduled on-site visit to gather preliminary information for planning/targeting on-site visit assessment activities; determining the core set of measures to be reviewed; determining which hybrid measures will be included in medical record validation; requesting core measures' source code, as needed; identifying areas that require additional clarification during the on-site visit; and determining whether the core set of measures needs to be expanded.

Capitation

A method of payment for providers. Under a capitated payment arrangement, providers are reimbursed on a per member/per month basis. The provider receives payment each month, whether the member needed services or not. Therefore, there is little incentive for providers to submit individual encounters, knowing that payment is not dependent on such submission.

Certified HEDIS Software Vendor

A third party, whose source code has been certified by NCQA, that contracts with an MCP to write source code for HEDIS measures. For a vendor's software to be certified by NCQA, all of the vendor's programmed HEDIS measures must be submitted to NCQA for automated testing of program logic, and a minimum of 70 percent of the measures must receive a "Pass" or "Pass With Qualifications" designation.

Claims-Based Denominator

When the eligible population for a measure is obtained from claims data. For claims-based denominator hybrid measures, MCPs must identify their eligible population and draw their sample no earlier than January of the year following the measurement year. This ensures that all claims incurred through December 31 of the measurement year are captured in their systems.

CMS (formerly known as Health Care Financing Administration, or HCFA)

The Centers for Medicare & Medicaid Services (CMS) provides health insurance to individuals through Medicare, Medicaid, and the State Children's Health Insurance Program (SCHIP). In addition, CMS regulates laboratory testing through Clinical Laboratory Improvement Amendments (CLIA), develops coverage policies, and initiates quality-of-care improvement activities. CMS also maintains oversight of nursing homes and continuing care providers. This includes home health agencies, intermediate care facilities for the mentally retarded, and hospitals.

CMS 1500

A type of health insurance claim form used to bill professional services (formerly HCFA 1500).

Computer Logic

A programmed, step-by-step sequence of instructions to perform a given task.

Continuous Enrollment Requirement

The minimum amount of time a member must be enrolled in an MCP to be eligible for inclusion in a measure, ensuring that the MCP has a sufficient amount of time to be held accountable for providing services to that member.

CPT

Current Procedural Terminology (CPT®) is a listing of billing codes generated by the American Medical Association (AMA) used to report the provision of medical services and procedures.

CVO

Credentials verification organization.

Data Completeness

The degree to which occurring services/diagnoses appear in the MCP's administrative data systems.

Data Completeness Study

An internal assessment developed and performed by an MCP, using a statistically sound methodology to quantify the degree to which occurring services/diagnoses appear or do not appear in the MCP's administrative data systems.

Denominator

The number of members who meet all criteria specified in the measure for inclusion in the eligible population. When using the administrative method, the entire eligible population becomes the denominator. When using the hybrid method, a sample of the eligible population becomes the denominator.

DRG Coding

Diagnostic-Related Group (DRG) coding sorts diagnoses and procedures for inpatient encounters by groups under major diagnostic categories with defined reimbursement limits.

DTaP

Diphtheria, tetanus, and acellular pertussis vaccine.

DT

Diphtheria and tetanus vaccine.

EDI

Electronic data interchange (EDI) is the direct computer-to-computer transfer of data.

Electronic Data

Data that are maintained in a computer environment versus a paper environment.

Encounter Data

Billing data received from a capitated provider. Although the MCP does not reimburse the provider for each individual encounter, submission of encounter data to the MCP allows the plan to collect the data for future HEDIS reporting.

Exclusions

Conditions outlined in HEDIS measure specifications that describe when a member should not be included in the denominator.

FFS

Fee-for-service (FFS) is a reimbursement mechanism in which the provider is paid for services billed.

Final Report

After the MCP's completion of any corrective actions, a final, written report is completed by the auditor documenting all findings and results of the HEDIS audit. The final report includes the summary report, IS capabilities assessment, medical record review validation findings, measure findings, and audit opinion (final audit statement).

Global Billing Practices

The practice of billing multiple services provided over a period of time in one inclusive bill, commonly used by obstetric (OB) providers to bill prenatal and postpartum care.

HbA1c Test

The HbA1c test (hemoglobin A1c test or glycosylated hemoglobin test) is a laboratory test that reveals average blood glucose over a period of two to three months.

HCFA 1500

The former type of claim form used to bill professional services. The claim form has been changed to the CMS 1500.

HCPCS

Healthcare Common Procedural Coding System, a standardized alphanumeric coding system that maps to certain CPT codes (also see CPT).

HEDIS

The Healthcare Effectiveness Data and Information Set (HEDIS), developed and maintained by NCQA, is a set of performance measures used to assess the quality of care provided by MCPs.

HEDIS Measure Determination (HD) Standards

The standards that auditors use during the audit process to assess an MCP's adherence to HEDIS measure specifications.

HEDIS Repository

The data warehouse where all data used for HEDIS reporting are stored.

HEDIS Warehouse

See HEDIS repository.

HiB

H. influenza type b vaccine.

HPL

High Performance Level: HSAG has defined the HPL as the most recent national HEDIS Medicaid 90th percentile, except for one measure (*Comprehensive Diabetes Care—Poor HbA1c Control*) for which lower rates indicate better performance. For this measure, the 10th percentile (rather than the 90th) shows excellent performance.

HSAG

Health Services Advisory Group, Inc.

Hybrid Measures

Measures that can be reported using the hybrid method.

Hybrid Method

The hybrid method requires MCPs to identify the eligible population using administrative data, then extract a systematic sample of 411 members from the eligible population, which becomes the denominator. Administrative data are then used to identify services provided to those 411 members. Medical records must be reviewed for members who do not have evidence of a service being provided using administrative data.

The hybrid method generally produces higher results, but is considerably more labor intensive. For example, an MCP has 10,000 members who qualify for the *Childhood Immunization* measure, and the plan chooses to perform the hybrid method. After randomly selecting 411 eligible members, the MCP finds, using administrative data, that 161 had evidence of receiving all of the Hepatitis B vaccinations. The MCP then obtains and reviews medical records for the 250 members who did not have evidence, using administrative data, of all of the Hepatitis B vaccinations. Of those 250 members, 54 are found to have all of the Hepatitis B vaccinations recorded in the medical record. The final rate for this measure, using the hybrid method, would be (161 + 54) /411, or 52 percent.

ICD-9-CM

ICD-9-CM, the acronym for the International Classification of Diseases, Ninth Revision, Clinical Modification, is the classification of diseases and injuries into groups according to established criteria used for reporting morbidity, mortality, and utilization rates, as well for billing purposes.

IDSS

The Interactive Data Submission System (IDSS) is used to report HEDIS data to NCQA.

Inpatient Data

Data derived from an inpatient hospital stay.

IRR

Interrater reliability (IRR) is the degree of agreement exhibited when a measurement is repeated under the same conditions by different raters.

IS

Information system (IS) is an automated system for collecting, processing, and transmitting data.

IPV

Inactivated polio vaccine.

IT

Information technology (IT) is the technology used to create, store, exchange, and use information in its various forms.

Key Data Elements

The data elements that must be captured to be able to report HEDIS measures.

LDL-C

Low-density lipoprotein cholesterol.

Logic Checks

Evaluations of programming logic to determine its accuracy.

LPL

Low performance level: For most measures, HSAG has defined the LPL as the most recent national HEDIS Medicaid 25th percentile. For one measure (*Comprehensive Diabetes Care—Poor HbA1c Control*) lower rates indicate better performance, and the LPL for this measure is the 75th percentile rather than the 25th.

Manual Data Collection

Collection of data through a paper process rather than an automated process.

Mapping Codes

The process of translating an MCP's propriety or nonstandard billing codes to industry standard codes specified in HEDIS measures. Mapping documentation should include a crosswalk of relevant codes, descriptions and clinical information, as well as the policies and procedures for implementing the codes.

Material Bias

For measures reported as a rate, any error that causes a ± 5 percent difference in the reported rate.

MCP

Managed care plan.

Medicaid Percentiles

The NCQA national percentile for each HEDIS measure for the Medicaid product line, used to compare MCP performance and assess the reliability of an MCP's HEDIS rates.

Medical Record Validation

The process that auditors follow to verify that the MCP's medical record abstraction meets industry standards and that the abstracted data are accurate.

Membership Data

Electronic MCP files containing information about members, such as their name, date of birth, gender, current address, and enrollment (i.e., when the member joined the plan).

mg/dL

Milligrams per deciliter.

Modifier Codes

Two- or five-digit extensions added to CPT codes to provide additional information about services/procedures.

MMR

Measles, mumps, and rubella vaccine.

NCQA

The National Committee for Quality Assurance (NCQA) is a not-for-profit organization that assesses, through accreditation reviews and standardized measures, the quality of care provided by managed health care delivery systems; reports results of those assessments to employers, consumers, public purchasers, and regulators; and ultimately seeks to improve the health care provided within the managed care industry.

NA

The *Not Applicable* (NA) HEDIS audit finding is used if an MCP follows the specifications for calculating a measure but the denominator is too small (i.e., less than 30) to report a valid rate.

NB

The *No Benefit* (NB) HEDIS audit finding is used when the MCP does not offer the health benefits required by the measure (e.g., mental health/chemical dependency).

NDC

National drug codes used for billing pharmacy services.

NR

The *Not Report* (NR) HEDIS audit finding may be given for one of two reasons: (1) the MCP chose not to report the result or (2) the MCP calculated the measure but the result was materially biased.

Numerator

The number of members from the denominator who received all the services as specified in the measure.

ODJFS

Ohio Department of Job and Family Services

Over-Read Process

The process of re-reviewing a sample of medical records by a different abstractor to assess the degree of agreement between two different abstractors and ensure the accuracy of abstracted data. The over-read process should be conducted by the MCP as part of its medical record review process, and auditors should overread a sample of the MCP's medical records as part of the audit process.

Pharmacy Data

Data derived from the provision of pharmacy services.

PCV

Pneumococcal conjugate vaccine.

Practitioner Data

Electronic files containing information about practitioners, such as the type of physician, specialty, reimbursement arrangement, and office location.

Primary Source Verification

The practice of reviewing the processes and procedures to input, transmit, and track data from its originating source to the HEDIS repository to verify that the originating information matches the output information for HEDIS reporting.

Proprietary Codes

Unique billing codes developed by an MCP, which have to be mapped to industry standard codes for HEDIS reporting.

Retroactive Enrollment

The effective date of a member's enrollment in an MCP that occurs prior to the date that the MCP is notified of that member's enrollment. Medicaid members who are retroactively enrolled in an MCP must be excluded from a HEDIS measure denominator if the time period from the date of enrollment to the date of notification exceeds the measure's allowable gap specifications.

Revenue Codes

Cost codes for facilities to bill by the following categories: services, procedures, supplies, and materials.

Sample Frame

In the hybrid method, the eligible population meeting all criteria specified in the measure from which the systematic sample is drawn.

Source Code

The written computer programming logic for determining the eligible population and the denominators and numerators for calculating the rates for each measure.

Standard Codes

Industry standard billing codes such as ICD-9-CM, CPT, DRG, Revenue, and UB-92 codes used for billing inpatient and outpatient health care services.

T-test Validation

A statistical validation of an MCP's positive medical record numerator events.

UB-92 Claims

A type of claim form used to bill hospital-based services, including drugs and supplies. UB-92 codes are primarily type of bill (TOB) and revenue codes.

Vendor

Any third party that contracts with an MCP to perform services. The most common delegated services are pharmacy, vision care, laboratory, claims processing, HEDIS software, and provider credentialing.

VZV

Varicella-zoster virus (chicken pox) vaccine.