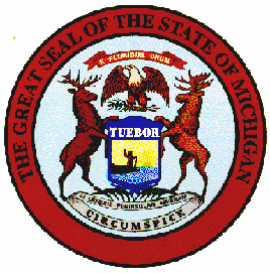
State of Michigan



Department of Community Health

Michigan Medicaid HEDIS® 2005 Results
STATEWIDE AGGREGATE REPORT

November 2005

HSAG
HEALTH SERVICES
ADVISORY GROUP

1600 East Northern Avenue, Suite 100 ◆ Phoenix, AZ 85020
Phone 602.264.6382 ◆ Fax 602.241.0757

HSAG
HEALTH SERVICES ADVISORY GROUP

CONTENTS

1. Executive Summary 1-1
Introduction 1-1
Key Findings and Recommendations 1-2
Summary of Results 1-6

2. How to Get the Most From This Report 2-1
Summary of Michigan Medicaid HEDIS 2005 Key Measures 2-1
Key Measure Audit Designations 2-2
Dimensions of Care 2-2
Changes to Measures 2-3
Performance Levels 2-3
Michigan Medicaid Averages 2-5
Interpreting and Using Reported Averages and Aggregate Results 2-5
Significance Testing 2-6
Calculation Methods: Administrative Versus Hybrid 2-6
Interpreting Results 2-7
Understanding Sampling Error 2-9
Health Plan Name Key 2-10

3. Pediatric Care 3-1
Introduction 3-1
Childhood Immunization Status 3-3
Adolescent Immunization Status 3-8
Well-Child Visits in the First 15 Months of Life 3-16
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life 3-22
Adolescent Well-Care Visits 3-26
Appropriate Treatment for Children With Upper Respiratory Infection 3-29
Pediatric Care Findings and Recommendations 3-31

4. Women's Care 4-1
Introduction 4-1
Breast Cancer Screening 4-2
Cervical Cancer Screening 4-5
Chlamydia Screening in Women 4-9
Prenatal and Postpartum Care 4-13
Women's Care Findings and Recommendations 4-21

5. Living With Illness 5-1
Introduction 5-1
Comprehensive Diabetes Care 5-3
Use of Appropriate Medications for People With Asthma 5-32
Controlling High Blood Pressure 5-41
Medical Assistance With Smoking Cessation—Advising Smokers to Quit 5-43
Living With Illness Findings and Recommendations 5-45

6. Access to Care 6-1
Introduction 6-1
Children's and Adolescents' Access to Primary Care Practitioners 6-2
Adults' Access to Preventive/Ambulatory Health Services 6-10
Access-to-Care Findings and Recommendations 6-16

7. HEDIS Reporting Capabilities 7-1
Key Findings 7-1
Conclusions and Recommendations 7-1

Appendix A: Tabular Results for Key Measures by Health Plan ..... A-i

Appendix B: National HEDIS 2004 Medicaid Percentiles B-1

Appendix C: Trend Tables C-1

Appendix D: Glossary D-1

ACKNOWLEDGMENTS AND COPYRIGHTS

HEDIS® refers to the Health Plan Employer Data and Information Set and is a registered trademark of the National Committee for Quality Assurance (NCQA).

NCQA HEDIS Compliance Audit™ is a trademark of the NCQA.

CAHPS® refers to the Consumer Assessment of Health Plans and is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

1. Executive Summary

Introduction

During 2004, the Michigan Department of Community Health (MDCH) contracted with 15 health plans to provide managed care services to 887,221 Michigan Medicaid enrollees.[1-1] To evaluate performance levels, MDCH implemented a system to provide objective, comparative review of health plan quality-of-care outcomes and performance measures. One component of the evaluation system is based on HEDIS. MDCH selected 16 HEDIS measures from the standard Medicaid HEDIS reporting set as the key measures to evaluate performance of the Michigan Medicaid health plans (MHPs). These 16 measures comprise 34 distinct rates.

MDCH expects its contracted health plans to support health care claims systems, membership and provider files, and hardware/software management tools that facilitate accurate and reliable reporting of HEDIS measures. MDCH has contracted with Health Services Advisory Group, Inc. (HSAG) to analyze Michigan Medicaid health plan HEDIS results objectively and evaluate each health plan's current performance level relative to national Medicaid percentiles. MDCH uses HEDIS rates for the annual Medicaid consumer guide, as well as for annual performance assessment.

Performance levels for Michigan Medicaid health plans have been established for all of the key measures. The performance levels have been set at specific, attainable rates and are based on national percentiles. This standardization allows for comparison to the performance levels. Health plans meeting the high performance level (HPL) exhibit rates among the top in the nation. The low performance level (LPL) has been set to identify health plans in the greatest need of improvement. Details are shown in Section 2 ("How to Get the Most From This Report").

HSAG has examined the key measures along four different dimensions of care: (1) Pediatric Care, (2) Women's Care, (3) Living With Illness, and (4) Access to Care. These dimensions reflect important groupings and expand on the dimensions model used by the Foundation for Accountability (FACCT). This approach to the analysis is designed to encourage consideration of the key measures as a whole rather than in isolation, and to think about the strategic and tactical changes required to improve overall performance.

Michigan Medicaid HEDIS results are analyzed in this report in several ways. For each of the four dimensions of care:

- A weighted average comparison presents the Michigan Medicaid 2005 results relative to the 2004 Michigan Medicaid weighted average and the national HEDIS 2004 Medicaid 50th percentiles.

[1-1] Michigan Medicaid Managed Care. *Medicaid Health Plan Enrollment Report*. January 2005.

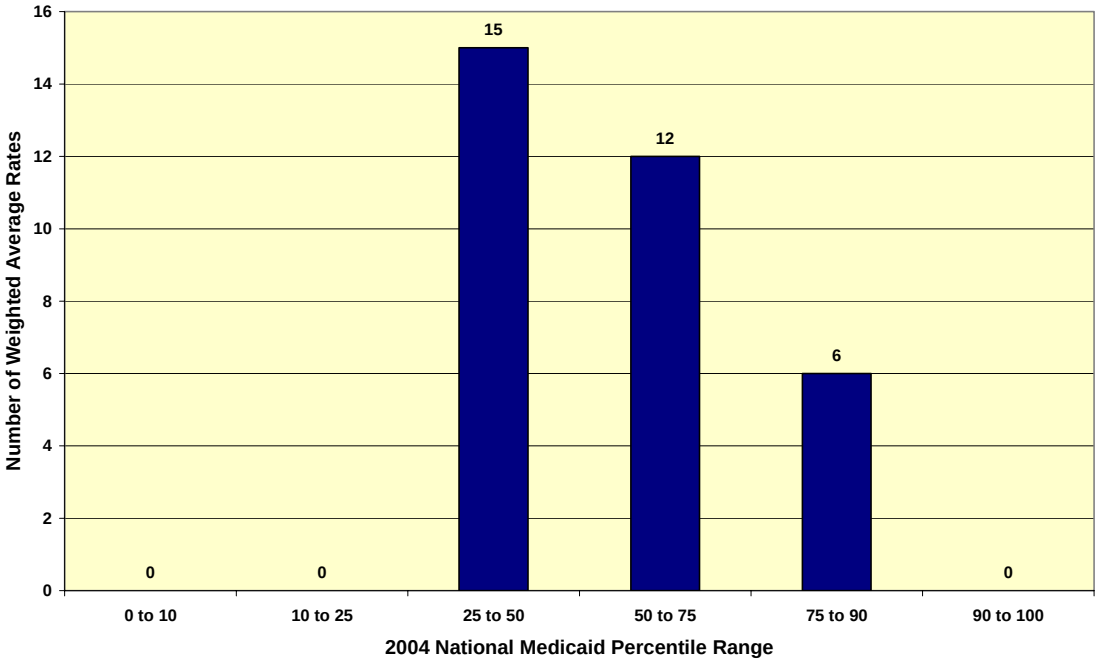
- A performance profile analysis discusses the overall Michigan Medicaid 2005 results and presents a summary of health plan performance relative to the Michigan Medicaid performance levels.
- A health plan ranking analysis provides a more detailed comparison, showing results relative to the Michigan Medicaid performance levels.
- A data collection analysis evaluates the potential impact of data collection methodology on reported rates.

In addition, Section 7 ("HEDIS Reporting Capabilities") of the report provides a summary of the HEDIS data collection processes used by the Michigan Medicaid health plans and audit findings in relation to NCQA's Information System (IS) standards.

Key Findings and Recommendations

This is the fifth year that HSAG has examined the MDCH HEDIS results, and continued improvement is observed. Figure 1-1 shows Michigan Medicaid health plan performance compared to national Medicaid benchmarks. The columns represent the number of Michigan Medicaid weighted averages falling into the percentile grouping listed on the horizontal axis. Of the 33 weighted averages for which national benchmarking data were available, 15 (or 46 percent) fell between the national Medicaid 25th and the 50th percentiles, 12 (or 36 percent) fell between the 50th and the 75th percentiles, and six (or 18 percent) fell between the 75th and the 90th percentiles. This is an improvement over last year, with many rates demonstrating increases, and movement into higher national percentile ranges.

Figure 1-1—Michigan Medicaid HEDIS 2005:
Health Plan Performance Compared to National Medicaid Benchmarks



Four of the 33 weighted averages showed a very slight decline from last year, and none was statistically significant. Interestingly, all of the declines in the weighted averages were in the Women's Care dimension. *Breast Cancer Screening* declined by 0.9 of a percentage point, *Chlamydia Screening in Women—Ages 16–20 Years* declined by 0.6 of a percentage point, *Chlamydia Screening in Women—Ages 21–25 Years* declined by 0.7 of a percentage point, and *Chlamydia Screening in Women—Combined Rate* declined by 0.6 of a percentage point.

Improvement in the Michigan Medicaid weighted average was seen in the remaining 30 key measures, with 11 showing statistically significant increases. The significant improvements were observed within specific groupings of the key measures, with increases seen in *Childhood Immunization Status*, *Adolescent Immunization Status* (both measures), *Prenatal and Postpartum Care* (both measures), and six of the seven *Comprehensive Diabetes Care* measures.

For some measures, the classic signs of successful quality improvement are seen. These include an increase in the average rate as well as a decrease in the range of rates, indicating less variation in performance across the Michigan MHPs. Fifty-nine percent (or 20 of 34 rates) showed a reduction in the range of reported rates. This trend is expected to continue, as the lower-performing MHPs continue to achieve improvements, and the higher-performing MHPs maintain or continue to realize slight improvements in reported results.

This report is organized according to the four dimensions of care to illustrate the complementary nature of these HEDIS measures. However, it is clear that the overarching issue affecting all dimensions is that of members accessing care—a similar finding in last year's analysis. The traditional direct-access measures (*Children's and Adolescents' Access to Primary Care Practitioners* and *Adults' Access to Preventive/Ambulatory Health Services)* had weighted averages below the national Medicaid 50th percentile and showed little improvement from last year for all numerators. The Access to Care measures gauge how well MHPs are reaching their "silent members"—those who never access routine care in a health plan provider office.

Statewide, some notable improvements were made over last year's performance. Despite already high performance in 2004, statistically significant improvement was observed for the *Childhood Immunization Status* measure. In addition, substantial improvements were observed by all health plans for the *Adolescent Immunization Status* measures. Michigan Medicaid performance for most of the *Comprehensive Diabetes Care* measures was exceptional, representing improving quality of care for individuals suffering from this disease. Finally, substantial improvement was seen across the state for the *Prenatal and Postpartum Care* measures, indicating that the quality of obstetrical care services is improving for Michigan Medicaid recipients.

Michigan Medicaid health plans can be very successful in bringing about quality improvement for targeted HEDIS performance measures. A review of the MHPs' annual quality improvement program evaluations found that all plans conducted numerous quality improvement (QI) initiatives. Most had disease management programs in place for such diseases as diabetes, asthma, hyperlipidemia, and hypertension. Most plans also had a prenatal care program to identify pregnant members and ensure delivery of the appropriate services. Many operated a smoking cessation program, aimed at identifying members who smoke and providing educational and support services

to assist in quitting. A review of these QI programs found that many were effective in bringing about performance improvement.

Five of the 15 MHPs (Community Choice Michigan, Great Lakes Health Plan, Midwest Health Plan, Molina Healthcare of Michigan, and Physicians Health Plan of Southwest Michigan) demonstrated statistically significant improvement in at least seven key measures. A review of the QI programs for these plans found that most were conducting similar activities compared with the other health plans, including case management for high-risk members, monthly provider lists of members overdue for services, provider profiles on performance, and provider and/or member educational materials. Three used member incentives targeted at specific HEDIS rates, which appeared to be successful. One tasked its pharmacies with assisting in the identification of diabetics by providing PCPs with lists of members receiving glucometers, and monitoring lists of patients on insulin therapy to ensure that the appropriate lab screening tests (HbA1c and LDL-C testing) were performed. While many of these initiatives supported improvement, the increase in rates could not be directly attributed to one specific QI activity.

HSAG recommends that the MHPs continually evaluate their QI initiatives to determine if they are effective. Each initiative should be critically re-evaluated on an annual basis to ensure that specified goals are achieved. Barrier analysis should be conducted to identify the root causes when performance does not meet standards. Interventions should be objectively assessed to determine if they are addressing the barriers and root causes that negatively impact performance. Work groups to perform these annual evaluations should be established and tasked with conducting the barrier analysis; evaluating the current QI activities to determine their effectiveness; and making recommendations on whether to continue, modify, or discontinue the activities. In addition, the work groups can brainstorm on other possible interventions to implement.

Efforts targeting improvement in the Access to Care dimension are more complex. The traditional QI initiatives are not likely to improve performance in this area. MDCH should consider modifying the Health Plan Performance Bonus Model by increasing the percentage weight of the Access to Care measures when calculating the performance bonus. In addition, MDCH should identify Access to Care as a top priority for targeting improvement efforts and obtain MHP buy-in. The MHPs, in turn, would need to commit resources to identifying their “silent members” who have never accessed services, other than in the emergency room or inpatient facility. Analysis of these utilization patterns should be performed to identify any trends, anomalies, or similarities by predefined groupings such as race, ethnicity, gender, age, or geographic location. Direct member outreach by the provider or the MHP, and member surveys, member incentives, or targeted mailings by the health plans may prove effective. It is anticipated that, as the MHPs are more successful in improving the Access to Care measures, additional improvements in other HEDIS measures will also be realized. Preventive screenings as well as chronic-care services should improve, and inappropriate utilization of emergency and inpatient facilities should decrease. Although the investment required to improve access to care may be costly, the benefits will bring about improvements to the Michigan Medicaid managed care program as a whole.

Weighted Average Comparisons for the Four Dimensions of Care

Figure 1-2 through Figure 1-5 show Michigan Medicaid HEDIS 2005 results for each dimension of care, comparing the current weighted average for each measure relative to the 2004 Michigan Medicaid weighted average and the national HEDIS 2004 Medicaid 50th percentile.

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

- The light-colored bars show the difference in percentage points between this year's Michigan results and last year's Michigan results, comparing the 2005 and 2004 Michigan Medicaid weighted averages.
- The dark-colored bars show the difference in percentage points between this year's Michigan results and the national results, comparing the 2005 Michigan Medicaid weighted average with the national HEDIS 2004 Medicaid 50th percentile.

  For all measures (except two), a bar to the *right* indicates an *improvement* in performance and a bar to the *left* indicates a *decline* in performance.

  The two exceptions are:

  1. *Well-Child Visits in the First 15 Months of Life—Zero Visits*
  2. *Comprehensive Diabetes Care—Poor HbA1c Control*

  For these exceptions, *lower* rates (a bar to the left) indicate *better* performance.
- A weighted average for *Advising Smokers to Quit* could not be calculated. National benchmarking data are not available for this measure.

Performance Level Analysis

Table 1-1 through Table 1-4 show performance summary results for all Michigan MHPs for each dimension of care. Results were calculated using a scoring algorithm based on individual health plan performance relative to the HPL, LPL, and national HEDIS 2004 Medicaid 50th percentile.

For each health plan, points were summed across all measures in the dimension and then averaged by the number of measures in that dimension. Fractions of 0.5 or greater were rounded up to the next whole number. *Not Applicable* ("NA") designations were not included in the denominator.

These results are presented in this report using a star system assigned as follows:

- Three stars (★★★) for performance at or above the HPL.
- Two stars (★★) for performance above the LPL but below the HPL.
- One star (★) for performance at or below the LPL, or for *Not Report* ("NR") designations.

Not Applicable designations are shown as "NA."

Summary of Results

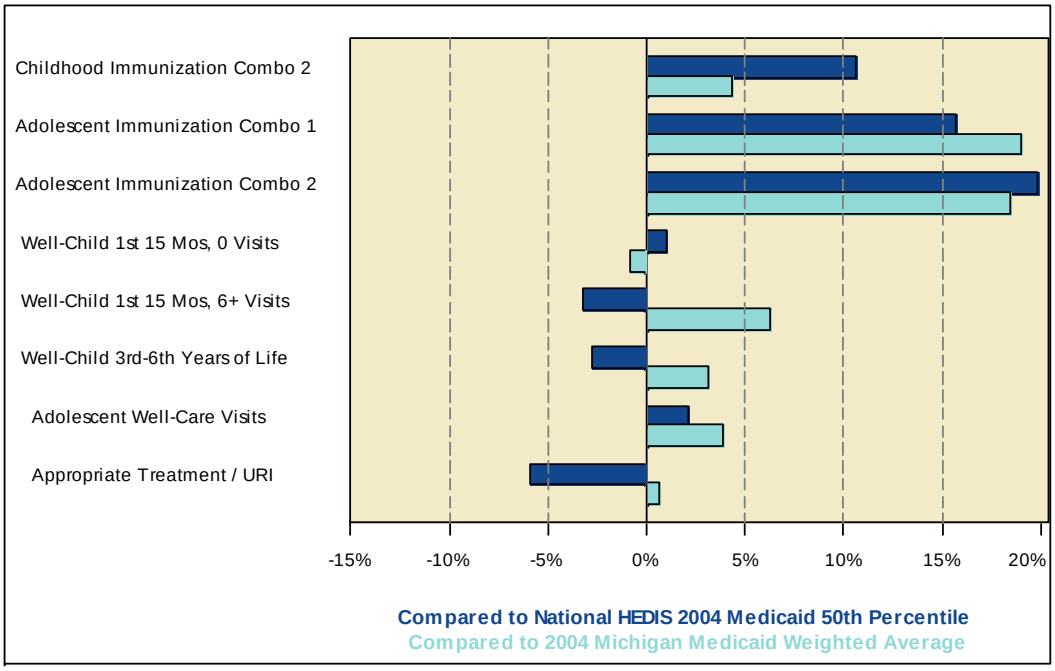
Pediatric Care

As observed in previous years, the Michigan managed care program continues to demonstrate exceptional performance in the *Childhood Immunization Status* measure. The weighted average of 71.7 percent is just below the national 2004 Medicaid 90th percentile of 72.5 percent and shows a statistically significant improvement over last year's rate. Most notable in the Pediatric Care dimension, however, is the improvement in both of the *Adolescent Immunization Status* measures. The weighted averages for these measures increased by 18.9 percentage points for *Combination #1* and by 18.5 percentage points for *Combination #2*—both of which were statistically significant improvements. Both are just below the national Medicaid 90th percentiles, and have nearly doubled over the 2003 rates. Although some of the improvement may be attributed to a change in state law, the achievement is still remarkable. Immunization results have been positively influenced by strong participation in the Michigan Childhood Immunization Registry (MCIR) as well as quality improvement initiatives conducted by the MHPs, and the MDCH Health Plan Performance Bonus program.

For the well-care visit measures, statewide performance was average. Improvements were noted in all weighted averages, although none was statistically significant. The weighted averages for the younger age groups (ages zero to 15 months, and ages three to six years) were below the national 2004 Medicaid 50th percentile, but above the 50th percentile for adolescents.

Statewide performance in the *Appropriate Treatment for Children With Upper Respiratory Infection* showed some improvement, although the weighted average fell below the 50th percentile.

Figure 1-2—Michigan Medicaid HEDIS 2005 Weighted Average Comparison: Pediatric Care



Note: For *Well-Child Visits in the First 15 Months of Life–Zero Visits*, a bar to the *left* (lower rates) indicates *better* performance.

Table 1-1—Michigan Medicaid HEDIS 2005 Performance Summary: Pediatric Care

Health Plan Name	Childhood Immunization Combo 2	Adolescent Immunization Combo 1	Adolescent Immunization Combo 2	Well-Child 1st 15 Mos, 0 Visits	Well-Child 1st 15 Mos, 6+ Visits	Well-Child 3rd–6th Yrs of Life	Adolescent Well-Care Visits	Appropriate Treatment URI
CAP	★★	★★	★★	★	★	★★	★★	★★
CCM	★★	★★★	★★★	★	★★	★	★★	★★
GLH	★★	★★	★★	★★	★★	★★	★★	★
HPM	★★	★★	★★★	★★	★★	★★	★★	★★
HPP	★★★	★★★	★★★	★★	★★	★★	★★	★
MCD	★★	★★	★★	★★	★★	★★	★★	★★
MCL	★★★	★★	★★	★★	★★	★	★★	★
MID	★★	★★	★★	★	★★	★★	★★	★★
MOL	★★	★★	★★	★	★	★★	★★	★★
OCH	★★	★★	★★	★★	★★	★★	★★	★★
PMD	★★★	★★★	★★★	★★	★★	★★	★★	★★
PRI	★★★	★★★	★★★	★★	★★	★★	★★	★★
PSW	★★★	★★★	★★★	★★	★★	★	★★	★★
THC	★★	★★	★★★	★	★	★★	★★	★
UPP	★★	★★★	★★★	★★	★★	★★	★★	★★

This symbol		shows this performance level
3 stars	★★★	≥ HPL
2 stars	★★	> LPL and < HPL
1 star	★	≤ LPL, or for *Not Report (NR)*
"NA" means "Not Applicable."		

Women's Care

Michigan Medicaid performance in Women's Care was mixed. Modest declines in the weighted averages were noted for *Breast Cancer Screening* and all three *Chlamydia Screening in Women* measures, and *Cervical Cancer Screening* showed only a slight increase over last year. Remarkable, however, is the performance improvement noted in the *Prenatal and Postpartum Care* measures. Both measures showed statistically significant improvement over last year's results, although both weighted averages were still below the national 2004 Medicaid 50th percentile.

Figure 1-3—Michigan Medicaid HEDIS 2005 Weighted Average Comparison: Women's Care

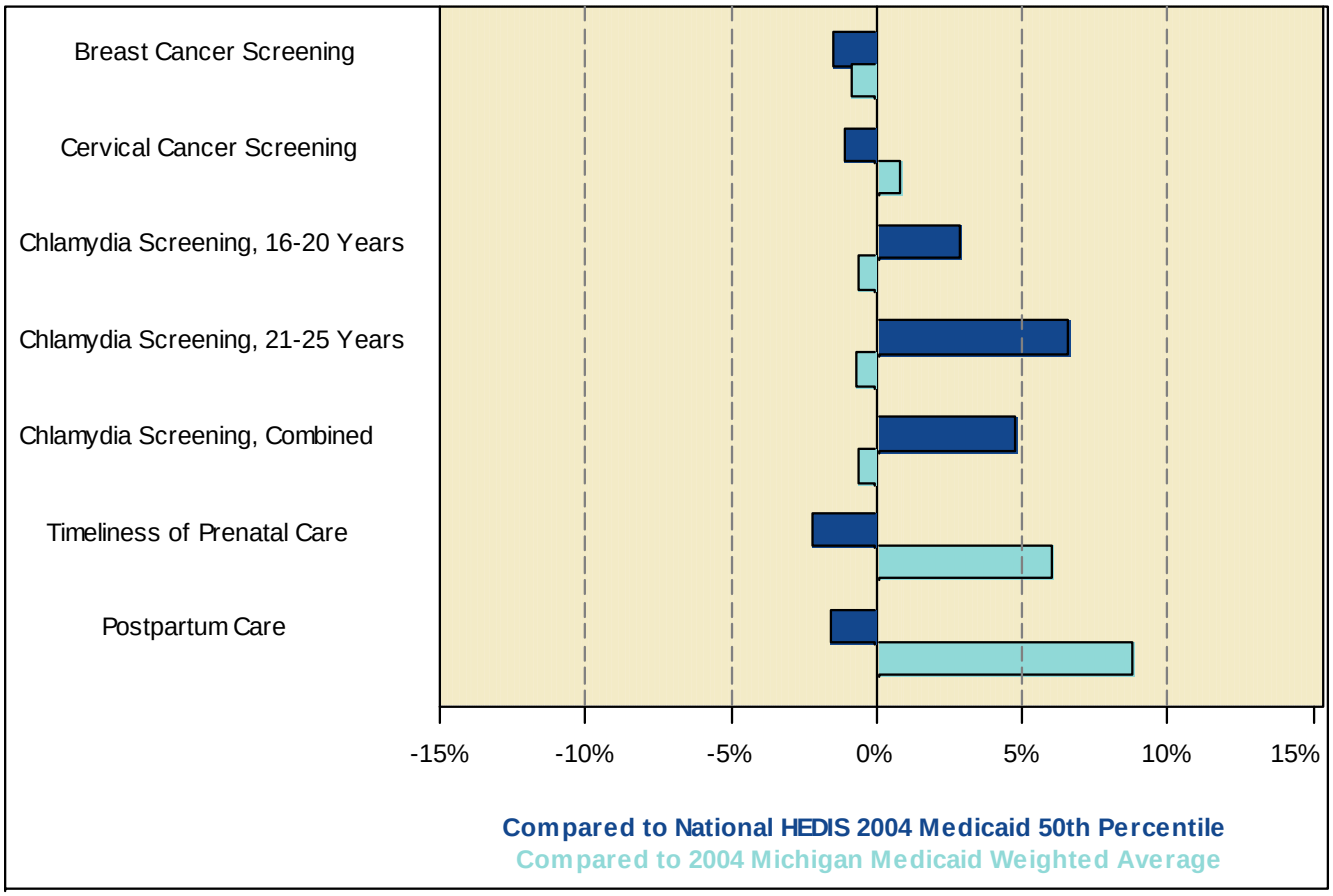


Table 1-2—Michigan Medicaid HEDIS 2005 Performance Summary: Women's Care

Health Plan Name	Breast Cancer Screening	Cervical Cancer Screening	Chlamydia Screening 16–20 Yrs	Chlamydia Screening 21–25 Yrs	Chlamydia Screening Combined	Timeliness of Prenatal Care	Postpartum Care
CAP	★★	★★	★★	★★	★★	★	★
CCM	★	★★	★★	★★	★★	★★	★★
GLH	★★	★★	★★	★★	★★	★★	★★
HPM	★★	★★	★★	★★	★★	★★	★★
HPP	★★	★★	★★	★★	★★	★★	★★
MCD	★	★★	★★	★★	★★	★★	★★
MCL	★★	★★	★★	★★	★★	★★	★★
MID	★	★★	★	★★	★	★	★
MOL	★★	★★	★★	★★	★★	★★	★★
OCH	★	★★	★★	★★★	★★	★	★
PMD	★★	★★	★★★	★★★	★★★	★★	★★
PRI	★★	★★★	★★	★★	★★	★★	★★
PSW	★★	★★	★★	★★	★★	★★	★★
THC	★	★★	★★	★★★	★★	★★	★
UPP	★★★	★★	★★	★★	★★	★★	★★

This symbol		shows this performance level
3 stars	★★★	≥ HPL
2 stars	★★	> LPL and < HPL
1 star	★	≤ LPL, or for *Not Report (NR)*
"NA" means "Not Applicable."		

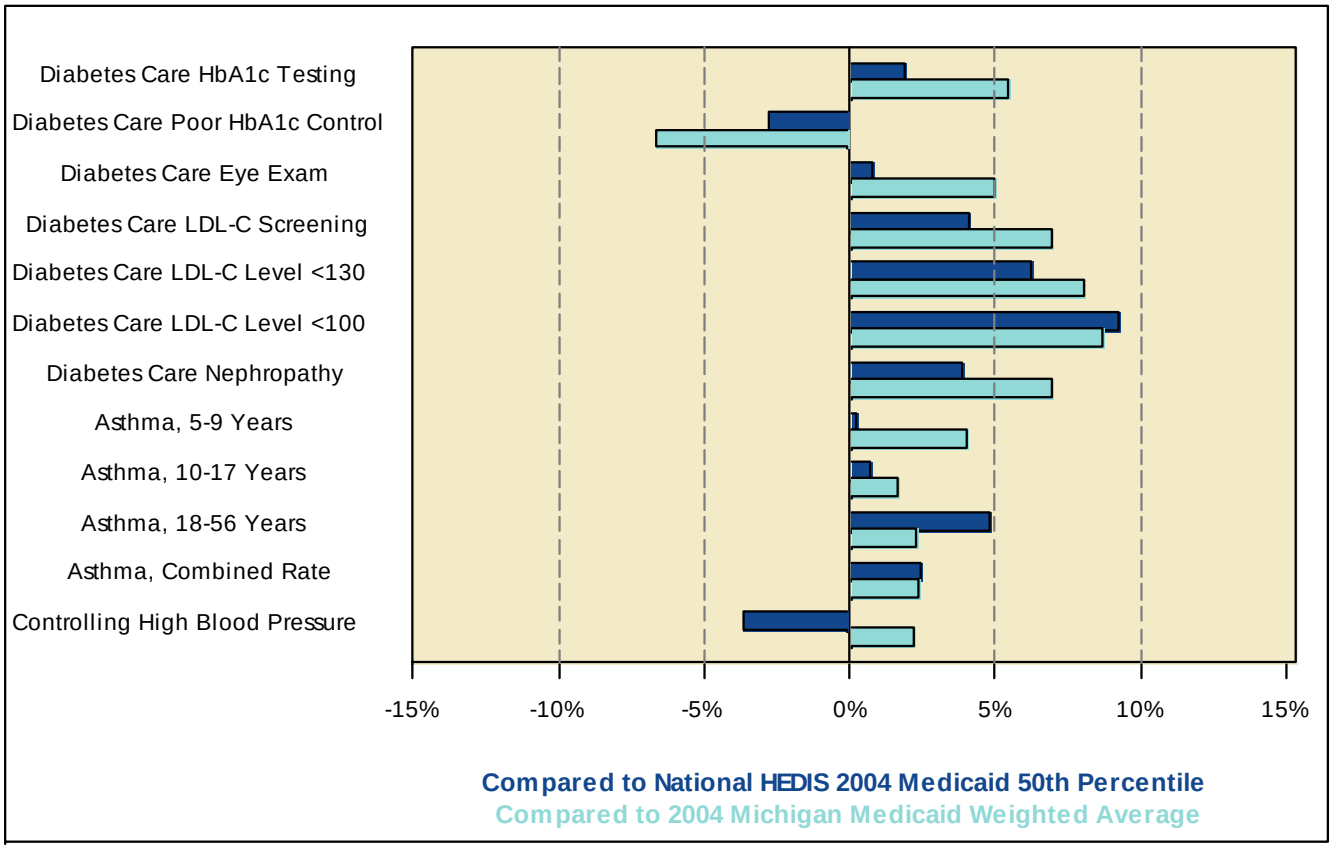
Living With Illness

Within the Living With Illness dimension, substantial improvements were noted in the *Comprehensive Diabetes Care* measures. All weighted averages increased, and six of the seven increases were statistically significant. Measures using laboratory values improved, including *HbA1c Testing* and *Poor HbA1c Control*, *LDL-C Screening*, *LDL-C Level <130*, and *LDL-C Level <100*. *Monitoring for Diabetic Nephropathy* also demonstrated statistically significant improvement. *Eye Exam* also improved by 5 percentage points, although the change was not statistically significant. Michigan Medicaid performance in *Comprehensive Diabetes Care* also consistently exceeded the national 2004 Medicaid 50th percentile for all key measures.

Performance scores for *Use of Appropriate Medications for People With Asthma* demonstrated improvement, although none was statistically significant. Statewide performance for asthmatics also exceeded the national 50th percentile for all related key measures.

Finally, an increase was observed in the *Controlling High Blood Pressure* weighted average, although opportunities for improvement for this measure still exist. An increase of 2.2 percentage points was noted; however, the weighted average fell below the national 50th percentile.

Figure 1-4—Michigan Medicaid HEDIS 2005 Weighted Average Comparison: Living With Illness



Notes: For *Comprehensive Diabetes Care—Poor HbA1c Control,* a bar to the *left* (lower rates) indicates *better* performance. *Advising Smokers to Quit* is not included in this figure. National benchmarking data are not available nor could a weighted average be calculated.

Table 1-3—Michigan Medicaid HEDIS 2005 Performance Summary: Living With Illness (Part 1)

Health Plan Name	Diabetes Care HbA1c Testing	Diabetes Care HbA1c Control	Diabetes Care Eye Exam	Diabetes Care LDL-C Screening	Diabetes Care LDL-C Level<130	Diabetes Care LDL-C Level<100	Diabetes Care Nephropathy
CAP	★★	★★	★★	★★	★★	★★	★★
CCM	★★	★★	★★	★★	★★	★★	★★
GLH	★★	★★	★★	★★	★★★	★★★	★★
HPM	★★	★★	★★	★★	★★	★★	★★
HPP	★★	★★	★★	★★	★★	★★	★★
MCD	★★★	★★	★★	★★★	★★★	★★★	★★★
MCL	★★	★★	★★	★★	★★	★★	★★
MID	★★	★★	★★	★★	★★★	★★★	★★
MOL	★★★	★★	★★	★★	★★	★★	★★
OCH	★	★	★	★★	★★	★★	★★
PMD	★★	★★	★★★	★★★	★★★	★★★	★★★
PRI	★★★	★★	★★	★★	★★★	★★★	★★
PSW	★★	★★	★★	★★	★★	★★	★★
THC	★★	★★	★★	★★	★★	★★	★★
UPP	★★★	★★★	★★★	★★★	★★★	★★	★★★

This symbol		shows this performance level
3 stars	★★★	≥ HPL
2 stars	★★	> LPL and < HPL
1 star	★	≤ LPL, or for *Not Report (NR)*
"NA" means "Not Applicable."		

Table 1-3—Michigan Medicaid HEDIS 2005 Performance Summary: Living With Illness (Part 2)						
Health Plan Name	Asthma 5–9 Yrs	Asthma 10–17 Yrs	Asthma 18–56 Yrs	Asthma Combined	Controlling High Blood Pressure	Advising Smokers to Quit
CAP	★★	★	★★	★	★★	NA
CCM	★★	★★	★★	★★	★★	NA
GLH	★★	★	★★	★★	★	NA
HPM	★★	★★	★★	★★	★★	NA
HPP	★★★	★★	★★	★★★	★★	NA
MCD	★★★	★★★	★★	★★★	★★★	NA
MCL	★★★	★★	★★★	★★★	★★	NA
MID	★	★	★★	★★	★★	NA
MOL	★★	★★	★★	★★	★★	NA
OCH	★	★★	★★	★★	★	NA
PMD	★★★	★★	★★	★★★	★★	NA
PRI	★★★	★★★	★★★	★★★	★★	NA
PSW	★★★	★★	★★	★★	★★	NA
THC	★	★★	★★	★★	★	NA
UPP	★★	★★	★★	★★	★★★	NA

This symbol		shows this performance level
3 stars	★★★	≥ HPL
2 stars	★★	> LPL and < HPL
1 star	★	≤ LPL, or for *Not Report (NR)*
"NA" means "Not Applicable."		

Access to Care

Performance in the Access to Care dimension continues to be a challenge for the Michigan Medicaid health plans. All rates showed modest improvement, although none exceeded the national 2004 Medicaid 50th percentile. In addition, the range of rates showed no improvement.

Figure 1-5—Michigan Medicaid HEDIS 2005 Weighted Average Comparison: Access to Care

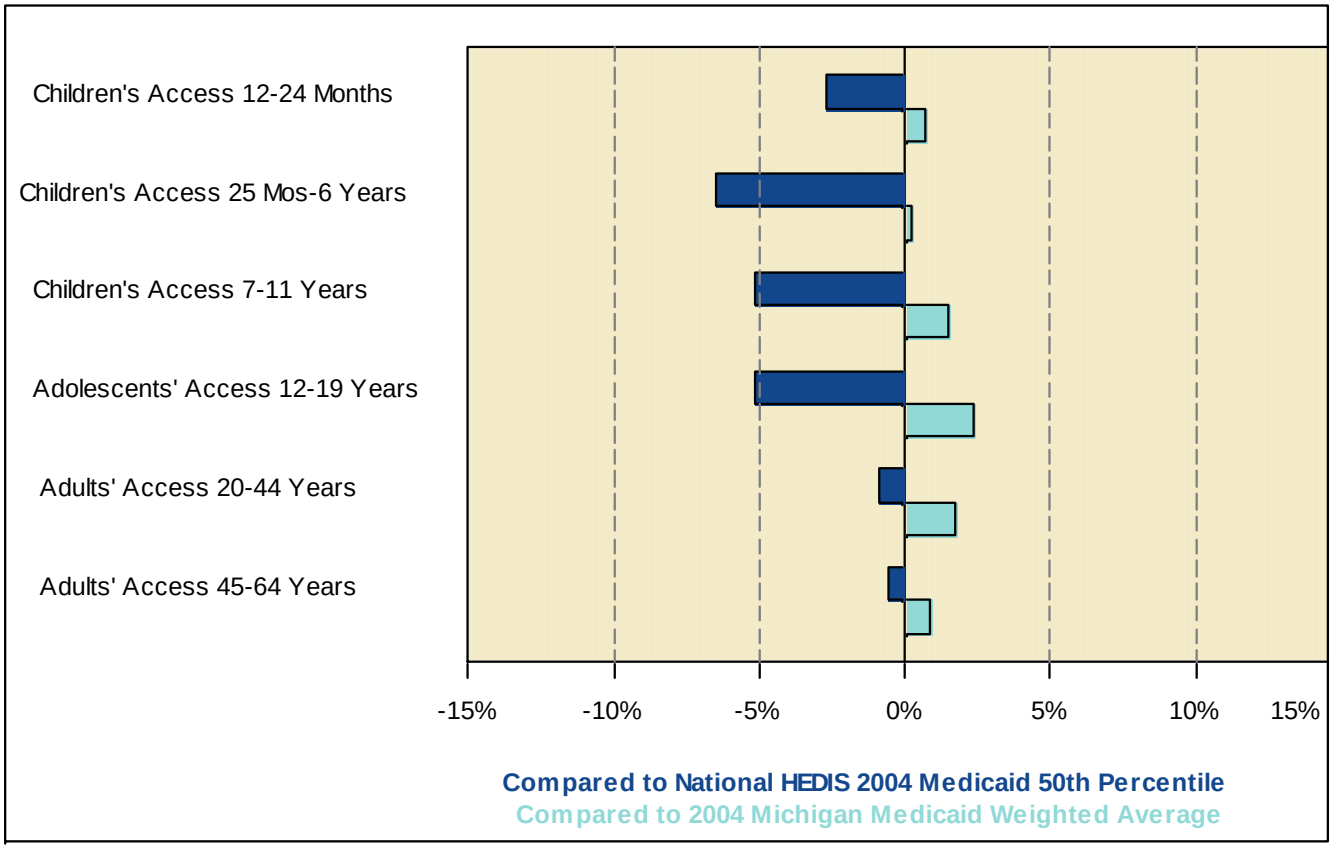


Table 1-4—Michigan Medicaid HEDIS 2005 Performance Summary: Access to Care						
Health Plan Name	Children's Access 12–24 Mos	Children's Access 25 Mos–6 Yrs	Children's Access 7–11 Yrs	Children's Access 12–19 Yrs	Adults' Access 20–44 Yrs	Adults' Access 45–64 Yrs
CAP	★★	★	★★	★★	★★	★
CCM	★	★	★	★★	★★	★★
GLH	★★	★★	★★	★★	★★	★★
HPM	★★	★★	★★	★★	★★	★★
HPP	★★	★★	★★	★★	★★	★★
MCD	★★	★★	★★	★★	★★	★★
MCL	★★	★★	★★	★★	★★	★★
MID	★★	★★	★★	★★	★★	★★
MOL	★★	★	★	★	★★	★★
OCH	★	★	★	★	★	★
PMD	★★	★★	★	★★	★★	★★
PRI	★★	★★	★★	★★	★★	★★★
PSW	★★	★★	★★	★★	★★	★★
THC	★	★	★	★	★★	★
UPP	★★	★★	★★	★★	★★	★★

This symbol		shows this performance level
3 stars	★★★	≥ HPL
2 stars	★★	> LPL and < HPL
1 star	★	≤ LPL, or for *Not Report (NR)*
"NA" means "Not Applicable."		

Summary of Michigan Medicaid HEDIS 2005 Key Measures

HEDIS includes a standard set of measures that can be reported by Medicaid health plans nationwide. MDCH selected 16 HEDIS measures from the standard Medicaid set and divided them into 34 distinct rates, shown in Table 2-1. These 34 rates represent the 2005 MDCH key measures. Fifteen Michigan MHPs were required to report the key measures in 2005.

Table 2-1—Michigan Medicaid HEDIS 2005 Key Measures

Standard HEDIS 2005 Measures	2005 MDCH Key Measures
1. Childhood Immunization Status	1. Childhood Immunization Status—Combination #2
2. Adolescent Immunization Status	2. Adolescent Immunization Status—Combination #1 3. Adolescent Immunization Status—Combination #2
3. Appropriate Treatment for Children With Upper Respiratory Infection	4. Appropriate Treatment for Children With Upper Respiratory Infection
4. Breast Cancer Screening	5. Breast Cancer Screening
5. Cervical Cancer Screening	6. Cervical Cancer Screening
6. Controlling High Blood Pressure	7. Controlling High Blood Pressure
7. Chlamydia Screening in Women	8. Chlamydia Screening in Women—Ages 16–20 Years 9. Chlamydia Screening in Women—Ages 21–25 Years 10. Chlamydia Screening in Women—Combined Rate
8. Comprehensive Diabetes Care	11. Comprehensive Diabetes Care—HbA1c Testing 12. Comprehensive Diabetes Care—Poor HbA1c Control 13. Comprehensive Diabetes Care—Eye Exam 14. Comprehensive Diabetes Care—LDL-C Screening 15. Comprehensive Diabetes Care—LDL-C Level <130 16. Comprehensive Diabetes Care—LDL-C Level <100 17. Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy
9. Use of Appropriate Medications for People With Asthma	18. Use of Appropriate Medications for People With Asthma—Ages 5–9 Years 19. Use of Appropriate Medications for People With Asthma—Ages 10–17 Years 20. Use of Appropriate Medications for People With Asthma—Ages 18–56 Years 21. Use of Appropriate Medications for People With Asthma—Combined Rate
10. Medical Assistance With Smoking Cessation	22. Medical Assistance With Smoking Cessation—Advising Smokers to Quit
11. Adults' Access to Preventive/ Ambulatory Health Services	23. Adults' Access to Preventive/Ambulatory Health Services—Ages 20–44 Years 24. Adults' Access to Preventive/Ambulatory Health Services—Ages 45–64 Years
12. Children's and Adolescents' Access to Primary Care Practitioners	25. Children's and Adolescents' Access to Primary Care Practitioners—Ages 12–24 Months 26. Children's and Adolescents' Access to Primary Care Practitioners—Ages 25 Months–6 Years 27. Children's and Adolescents' Access to Primary Care Practitioners—Ages 7–11 Years 28. Children's and Adolescents' Access to Primary Care Practitioners—Ages 12–19 Years
13. Prenatal and Postpartum Care	29. Prenatal and Postpartum Care—Timeliness of Prenatal Care 30. Prenatal and Postpartum Care—Postpartum Care
14. Well-Child Visits in the First 15 Months of Life	31. Well-Child Visits in the First 15 Months of Life—Zero Visits 32. Well-Child Visits in the First 15 Months of Life—Six or More Visits
15. Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	33. Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
16. Adolescent Well-Care Visits	34. Adolescent Well-Care Visits

Key Measure Audit Designations

Through the audit process, each measure reported by a health plan is assigned an NCQA-defined audit designation. Measures can receive one of two predefined designations: *Report* or *Not Report*. An audit designation of *Report* indicates that the health plan complied with all HEDIS specifications to produce an unbiased, reportable rate or rates, which can be released for public reporting. An audit designation of *Not Report* indicates that the rate will not be publicly reported.

A subset of the *Report* designation is the *Not Applicable* assignment to a rate. Although a health plan may have complied with all applicable specifications, the denominator identified may be considered too small to report a rate (i.e., less than 30). The measure would have been assigned a *Report* designation with a *Not Applicable* rate. For HEDIS 2005, there were no key measures reported by any of the health plans that had a *Not Applicable* rate.

It should be noted that NCQA allows health plans to "rotate" HEDIS measures in some circumstances. A "rotation" schedule enables health plans to use the audited and reportable rate from the prior year. This strategy allows health plans with higher rates for some measures to expend resources toward improving rates for other measures. Rotated measures must have been audited in the prior year and must have received a *Report* audit designation. Only hybrid measures are eligible to be rotated.

The health plans that met the HEDIS criteria for hybrid measure rotation could exercise that option if they chose to do so. Nine health plans chose to rotate measures in 2005, and a total of 23 rates were rotated. Following NCQA methodology, rotated measures were assigned the same reported rates from 2004 and were included in the calculations for the Michigan Medicaid weighted averages.

Dimensions of Care

HSAG has examined four different dimensions of care for Michigan Medicaid members: Pediatric Care, Women's Care, Living With Illness, and Access to Care. These dimensions reflect important groupings similar to the dimensions model used by the FACCT. This approach to the analysis is designed to encourage health plans to consider the key measures as a whole rather than in isolation, and to think about the strategic and tactical changes required to improve overall performance.

Changes to Measures

For HEDIS reporting year 2005, NCQA made a few modifications to two key measures included in this report, which may impact trending patterns:

Comprehensive Diabetes Care

- The denominator specifications were revised to remove Glucophage/metformin from the list of diabetic medications used to identify members as diabetic. This change is expected to lessen the inclusion of nondiabetics in the measure's denominator.
- The glycohemoglobin test was removed from the HbA1c screening and control indicators. This test does not meet the criteria for an HbA1c test.

Controlling High Blood Pressure

- The use of medical records and blood pressure readings within the same medical group was clarified. This change ensures more consistency in collection of the numerator event.

Performance Levels

The purpose of identifying performance levels is to compare to national benchmarks the quality of services provided to Michigan Medicaid managed care beneficiaries and ultimately improve the Michigan Medicaid average for all of the key measures. The HPL represents current high performance in national Medicaid managed care, and the LPL represents below-average performance nationally. Health plans should focus their efforts on reaching and/or maintaining the HPL for each key measure, rather than comparing themselves to other Michigan MHPs.

Comparative information in this report is based on the national NCQA Medicaid HEDIS 2004 results, which are the most recent percentiles available from NCQA. For this report, HEDIS rates were calculated to the sixth decimal place. The results displayed in this report were rounded to the first decimal place, to be consistent with the display of national percentiles. There are some instances in which the rounded rate may appear the same; however, the more precise rates are not identical. In these instances, the hierarchy of the scores in the graphs is displayed in the correct order. For example, Figure 3-8 shows that a total of five health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile. However, one of the five health plans appears to have a rate (46.3 percent) identical to the 50th percentile. This health plan had an actual rate of 0.463250 which is slightly higher than the 46.3 percent 50th percentile.

For most key measures included in this report, the 90th percentile indicates the HPL, the 25th percentile represents the LPL, and average performance falls between the LPL and the HPL. This means that Michigan MHPs with reported rates above the 90th percentile (HPL) rank in the top 10 percent of all Medicaid health plans nationally. Similarly, health plans reporting rates below the 25th percentile (LPL) rank in the bottom 25 percent nationally for that measure.

There are two key measures for which this differs—i.e., the 10th percentile (rather than the 90th) shows excellent performance and the 75th percentile (rather than the 25th) shows below average performance—because for these two measures only, *lower* rates indicate better performance. The two measures are:

- *Well-Child Visits in the First 15 Months of Life—Zero Visits*, for which the *lower* rates of no visits indicate *better* care.
- *Comprehensive Diabetes Care—Poor HbA1c Control*, for which the *lower* rates of poor control indicate *better* care.

NCQA has not published national percentiles (90th, 50th, and 25th percentiles) for the *Medical Assistance With Smoking Cessation—Advising Smokers to Quit* since the 2002 reporting year. Given the lack of more recent performance data, no HPL or LPL has been established for this key measure. Instead, health plan results are ranked highest to lowest and are compared with the 2004 Michigan Medicaid average.

This report identifies and specifies the number of Michigan MHPs with HPL, LPL, and average performance levels.

Performance Trend Analysis

In Appendix C, the column titled "2004–2005 Health Plan Trend" shows, by key measure, the comparison between the 2004 results and the 2005 results for each health plan. A conservative method was implemented to assess statistical significance (i.e., 95 percent confidence intervals that did not overlap were considered statistically significant). Trends are shown graphically, using the key below:

- ⬆ Denotes a significant improvement in performance (the rate has increased more than 10 percentage points)
- ⬅➡ Denotes no significant change in performance (the rate has not changed more than 10 percentage points, which is considered within the margin of error)
- ⬇ Denotes a significant decline in performance (the rate has decreased more than 10 percentage points)

Different symbols (▲▼) are used to indicate a significant performance change for two key measures. For only these two key measures (*Well-Child Visits in the First 15 Months of Life—Zero Visits* and *Comprehensive Diabetes Care—Poor HbA1c Control*), a decrease in the rate indicates better performance. A downward-pointing triangle (▼) denotes a significant *decline* in performance, as indicated by an *increase* of more than 10 percentage points in the rate. An upward-pointing triangle (▲) denotes a significant *improvement* in performance, as indicated by a *decrease* of more than 10 percentage points in the rate.

Michigan Medicaid Averages

The principal measure of overall Michigan Medicaid managed care performance on a given key measure is the *weighted* average rate. The use of a weighted average, based on the health plan's eligible population for that measure, provides the most representative rate for the overall Michigan Medicaid population. Weighting the rate by the health plan-eligible population size ensures that rates for a health plan with 125,000 members, for example, have a greater impact on the overall Michigan Medicaid rate than do the rates for a health plan with 10,000 members.

Interpreting and Using Reported Averages and Aggregate Results

The 2005 Michigan Medicaid weighted average was 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 Michigan's Medicaid enrollees, rather than the average performance of Michigan MHPs.

The 2005 Michigan Medicaid aggregate results, which illustrate how much of the final rate is derived from administrative data and how much from medical record review, is not an average. It is the sum of all numerator events divided by the sum of all the denominators across all the reporting health plans for a given measure.

Example

For example, three health plans in a given state reported for a particular measure:

- Health Plan A used the administrative method and had 6,000 numerator events out of 10,000 members in the denominator (60 percent).
- Health Plan B also used the administrative method and found 5,000 numerator events out of 15,000 members (33 percent).
- Health Plan C used the hybrid methodology and had 8,000 numerator events (1,000 of which came from medical record abstraction) and had 16,000 members in the denominator (50 percent).
- There are a total of 41,000 members across health plans.
- There are 19,000 numerator events across health plans, 18,000 from administrative data, and 1,000 from medical record abstraction.
- The rates are as follows:
  - The overall aggregate rate is 46 percent (or 19,000/41,000).
  - The administrative aggregate rate is 44 percent (or 18,000/41,000).
  - The medical review rate is 2 percent (or 1,000/41,000).

Significance Testing

In this report, differences between the 2004 and 2005 Michigan Medicaid weighted averages have been analyzed using a t-test to determine if the change was 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. This risk level, or alpha level, means that 5 times out of 100 we may find a statistically significant difference between the mean values even if none actually existed (that is, it happened "by chance"). All comparisons between the 2004 and 2005 Michigan Medicaid weighted averages reported as statistically significant in this report are significant at the 0.05 level.

Calculation Methods: Administrative Versus Hybrid

Administrative Method

The administrative method requires health plans to identify the eligible population (i.e., the denominator) using administrative data, derived from claims and encounters (i.e., statistical claims). In addition, the numerator(s), or services provided to the members in the eligible population, are derived solely 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. There are measures in each of the four dimensions of care in which HEDIS methodology requires that the rates be derived using only the administrative method, and medical record review is not permitted. These are:

- *Appropriate Treatment for Children With Upper Respiratory Infection*
- *Chlamydia Screening in Women*
- *Use of Appropriate Medications for People With Asthma*
- *Children's and Adolescents' Access to Primary Care Practitioners*
- *Adults' Access to Preventive/Ambulatory Health Services*

The administrative method is cost-efficient, but it can produce lower rates due to incomplete data submission by capitated providers.

Hybrid Method

The hybrid method requires health plans to identify the eligible population using administrative data, and then extract a systematic sample of members from the eligible population, which becomes the denominator. Administrative data are used to identify services provided to those members. Medical records must then be reviewed for those 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, a health plan has 10,000 members who qualify for the *Prenatal and Postpartum Care* measure. The health plan chooses to perform the hybrid method. After randomly selecting 411 eligible members, the health plan finds that 161 members had evidence of a postpartum visit using administrative data. The health plan then obtains and reviews medical records for the 250 members who did not have evidence of a postpartum visit using administrative data. Of those 250 members, 54 were found to have a postpartum visit recorded in the medical record. The final rate for this measure, using the hybrid method, would therefore be (161 + 54)/411, or 52 percent.

In contrast, using the administrative method, if the health plan finds that 4,000 members out of the 10,000 had evidence of a postpartum visit using only administrative data, the final rate for this measure would be 4,000/10,000, or 40 percent.

Interpreting Results

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

Four questions should be asked when examining these data:

1. How accurate are the results?
2. How do Michigan Medicaid rates compare to national percentiles?
3. How are Michigan Medicaid health plans performing overall?
4. Can the health plans 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 Michigan Medicaid health plans are required by MDCH to have their HEDIS results confirmed by an NCQA HEDIS Compliance Audit.™ 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 accuracy of results is best explained using an example. Suppose a health plan uses the hybrid method to derive a *Postpartum Care* rate of 52 percent. Because of sampling error, the true rate is actually ± 5 percent of this rate—somewhere between 47 percent 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 percent 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, health plans should understand and consider the issue of sampling error when implementing interventions.

2. How do Michigan Medicaid rates compare to national percentiles?

For each measure, a health plan ranking presents the reported rate in order from highest to lowest, with bars representing the established HPL, LPL, and the national HEDIS 2004 Medicaid 50th percentile. In addition, the 2005, 2004, and 2003 Michigan Medicaid weighted averages are presented for comparison purposes.

Michigan Medicaid health plans with reported rates above the 90th percentile (HPL) rank in the top 10 percent of all Medicaid health plans nationally. Similarly, health plans reporting rates below the 25th percentile (LPL) rank in the bottom 25 percent nationally for that measure.

3. How are Michigan Medicaid health plans performing overall?

For each dimension, a performance profile analysis compares the 2005 Michigan Medicaid weighted average for each rate with the 2004 and 2003 Michigan Medicaid weighted averages and the national HEDIS 2004 Medicaid 50th percentile.

4. Can the health plans do a better job calculating the measures?

For each rate, a data collection analysis shows the number of health plans using each methodology (hybrid or administrative). For all except the administrative-only 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. Columns to the right of the stacked bar show precisely how much of the final rate was derived from the administrative method and how much 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 Michigan 2005 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 7 of this report discusses HEDIS reporting capabilities of the Michigan Medicaid health plans.

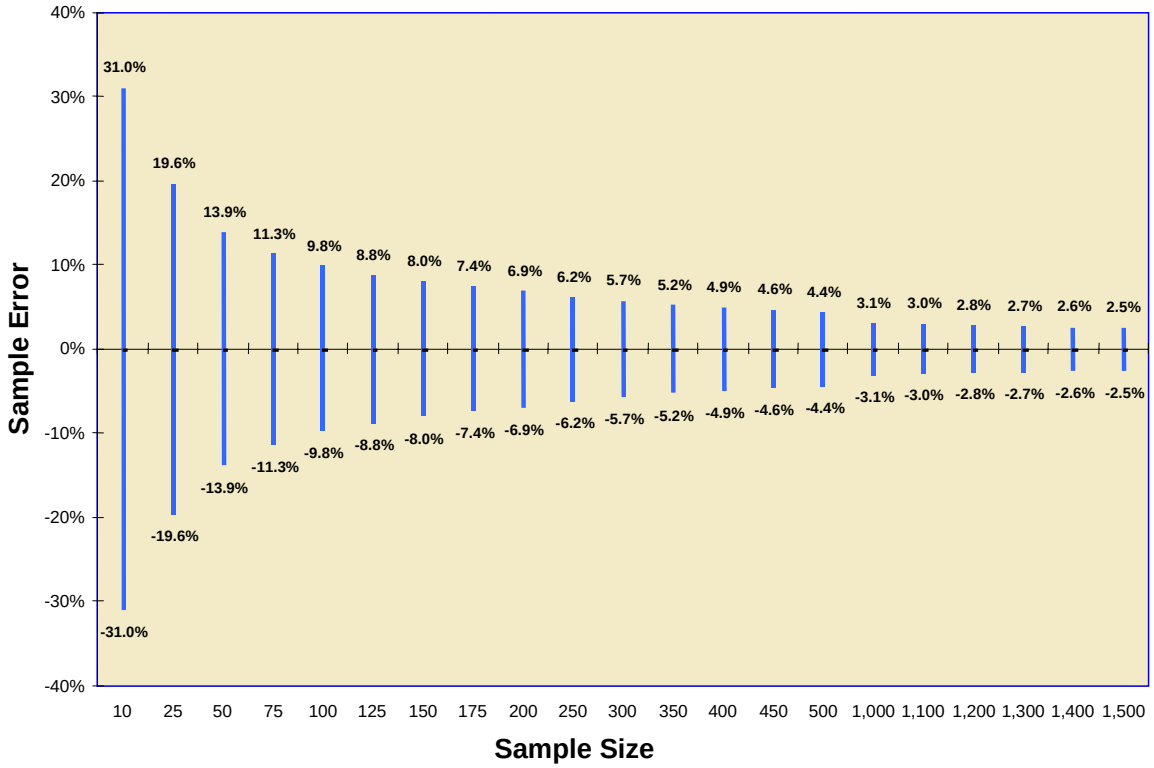
Understanding Sampling Error

Correct interpretation of results for measures collected using the HEDIS hybrid methodology requires an understanding of sampling error. It is rarely possible logistically or financially to do medical record review for the entire eligible population for a given measure. Measures collected using the HEDIS hybrid method include only a sample from the population, and statistical techniques are used 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 must be such that everyone in the eligible population has an equal chance of being selected. The HEDIS hybrid method prescribes a systematic sampling process selecting at least 411 members of the eligible population. Health plans may use a 5 percent, 10 percent, 15 percent, or 20 percent oversample to replace invalid cases (e.g., a male selected for postpartum care).

Figure 2-1 shows that if 411 health plan members are included in a measure, the margin of error is approximately ± 4.9 percentage points. Note that the data in this figure are based on the assumption that the size of the eligible population is greater than 2,000. The smaller the number included in the measure, the larger the sampling error.

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



As the above figure shows, sample 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. This does not mean that all such differences are important. On the other hand, the difference between two measured rates may not be statistically significant, but may, nevertheless, be important. The judgment of the reviewer is always a requisite for meaningful data interpretation.

Health Plan Name Key

Figures in the following sections of the report show overall health plan performance for each of the key measures. Below is the name code for each of the health plan abbreviations used in the figures.

Table 2-2—2005 Michigan MHPs

Code	Health Plan Name
CAP	Cape Health Plan
CCM	Community Choice Michigan
GLH	Great Lakes Health Plan
HPM	Health Plan of Michigan, Inc.
HPP	HealthPlus Partners, Inc.
MCD	M-CAID
MCL	McLaren Health Plan
MID	Midwest Health Plan
MOL	Molina Healthcare of Michigan
OCH	OmniCare Health Plan
PMD	Physicians Health Plan of Mid-Michigan Family Care
PRI	Priority Health Government Programs, Inc.
PSW	Physicians Health Plan of Southwest Michigan
THC	Total Health Care, Inc.
UPP	Upper Peninsula Health Plan

3. Pediatric Care

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. Abnormalities in growth, hearing, and vision undetected in toddlers impact future learning opportunities and experiences. Early detection of developmental difficulties provides the greatest opportunity for intervention and resolution so that children continue to grow and learn free from any health-related limitations.

Vaccines are among the greatest public health achievements of the 20th century.[3-1] In 1998, 73 percent of children received all vaccines recommended for universal administration. Children receiving health care under Medicaid programs continued to lag behind children covered by commercial health plans. For example, in 2000, 66.8 percent of children in commercial health plans received Combination One vaccinations, while 56.4 percent of children in Medicaid programs received these same vaccinations.[3-2] By 2004, this gap widened slightly: 74.4 percent for children in commercial programs and 62.0 percent for children in Medicaid programs.

Healthy People 2010 set a national goal of enrolling 95 percent of children under 6 years of age in an immunization registry.[3-3] During the baseline measurement year (1999), only 32 percent of children under 6 years of age participated in an immunization registry. Michigan Childhood Immunization Registry (MCIR) provides health care providers with access to immunization records and allows them to more effectively identify children who are behind in their immunizations. All health care providers in the State of Michigan who provide immunization services to a child born after December 31, 1993, are required to report each immunization to the registry. Since 1996, the electronic database has grown to include more than 40 million vaccinations provided for 3 million Michigan children. MCIR increased provider participation from 42 percent in 1998 to 80 percent in 2004.[3-4] As a result of increased provider participation, major barriers to infant and childhood immunizations have been identified, including missed opportunities to administer vaccines.

Recently, there has been an increased focus on the overuse of antibiotic therapies for viral conditions due to a concern with the development of increasingly resistant strains of infectious organisms. According to the Centers for Disease Control and Prevention, tens of millions of

[3-1] Healthy People 2010: Leading Health Indicators. Available at: http://www.healthypeople.gov/Document/html/uih/uih_bw/uih_4thm. Accessed on: August 18, 2005.
[3-2] National Committee for Quality Assurance. *The State of Managed Care Quality. 2004* (Standard Version). Washington, DC: Author; 2004:29. Available at: http://www.ncqa.org/communications/SOMC/SOHC2004.pdf Accessed on: August 19, 2005.
[3-3] Healthy People 2010: Objectives for Improving Health. Available at: http://www.healthypeople.gov/Document/HTML\Volume1\14Immunization.htm. Accessed on August 19, 2005.
[3-4] Michigan Public Health Institute. 2001 Michigan Childhood Immunization Registry. Available at: http://www.mcir.org/pro_accomp.htm. Accessed on August 19, 2005.

antibiotics are prescribed inappropriately each year.[3-5] For HEDIS 2005, MDCH included a new measure into the key measure set named *Appropriate Treatment for Children With Upper Respiratory Infection*. This measure collects data on overuse of antibiotics for children diagnosed with an upper respiratory infection.

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

The Pediatric Care dimension encompasses the following MDCH key measures:

- **Childhood Immunization Status**
  - *Childhood Immunization Status—Combination #2*
- **Adolescent Immunization Status**
  - *Adolescent Immunization Status—Combination #1*
  - *Adolescent Immunization Status—Combination #2*
- **Well-Care Visits**
  - *Well-Child Visits in the First 15 Months of Life—Zero Visits*
  - *Well-Child Visits in the First 15 Months of Life—Six or More Visits*
  - *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*
  - *Adolescent Well-Care Visits*
- **Appropriate Treatment for Children with Upper Respiratory Infection**
  - *Appropriate Treatment for Children with Upper Respiratory Infection*

[3-5] Centers for Disease Control and Prevention, Department of Health and Human Services. Snort. Sniffle, Sneeze. No Antibiotics Please! Available at: http://www.cdc.gov/drugresistance/community/snortsnifflesneezespot/index.htm. Accessed on September 20, 2005.

Childhood Immunization Status

Over the last 50 years, childhood vaccination has led to dramatic declines in many life-threatening diseases such as polio, tetanus, whooping cough, mumps, measles, and meningitis. However, in the United States, approximately 300 children still die every year from these vaccine-preventable diseases and many more suffer from blindness, hearing loss, diminished motor functioning, liver damage, and coma because they have not been immunized.[3-6]

Overall, the State of Michigan has made notable progress in improving childhood immunization. Eighty-nine percent of children have two or more doses recorded in the MCIR, while the national average for registries is 49 percent.[3-7]

Key measures in this section include:

- *Childhood Immunization Status—Combination #2*

This key measure is commonly referred to as *Combo 2*.

[3-6] National Committee for Quality Assurance. *The State of Managed Care Quality, 2001.* Standard Version. Washington, DC: Author; 2001:39.

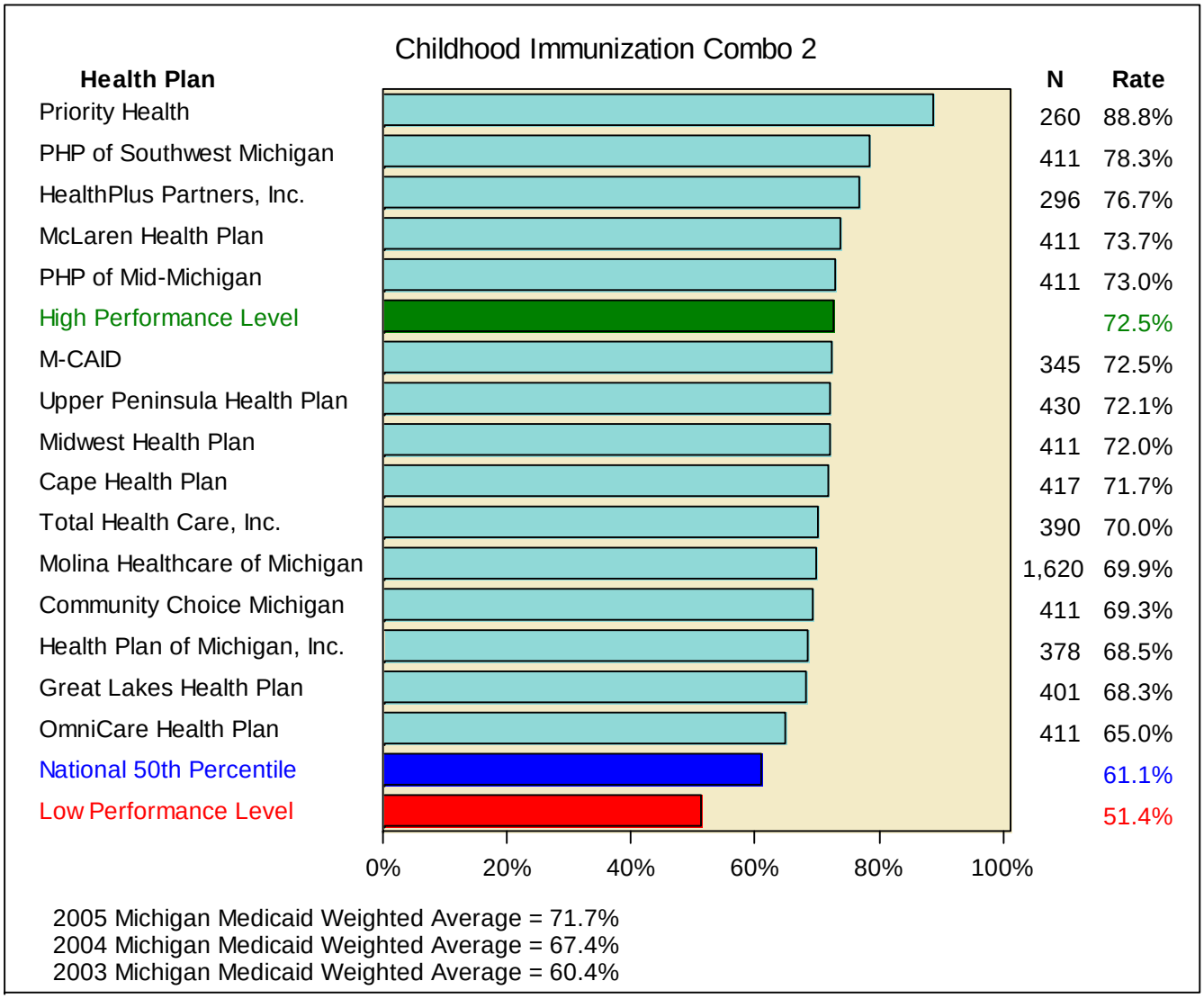
[3-7] Michigan Public Health Institute. Information for Providers: Accomplishments. 2001 Michigan Childhood Immunization Registry. Available at: http://www.mcir.org/pro_accomp.htm. Accessed on August 19, 2005.

HEDIS Specification: Childhood Immunization Status—Combination #2

Childhood Immunization Status—Combination #2 calculates the percentage of enrolled children who turned two years old during the measurement year, who were continuously enrolled for 12 months immediately preceding their second birthdays, and who were identified as having four DTaP/DT, three IPV, one MMR, three Haemophilus influenzae type b (Hib), three hepatitis B, and one varicella-zoster virus (chickenpox) vaccination (VZV), each within the allowable time period and by the member's second birthday.

Health Plan Ranking: Childhood Immunization Status—Combination #2

Figure 3-1—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Childhood Immunization Status—Combination #2



Five health plans met the HPL of 72.5 percent, and all health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

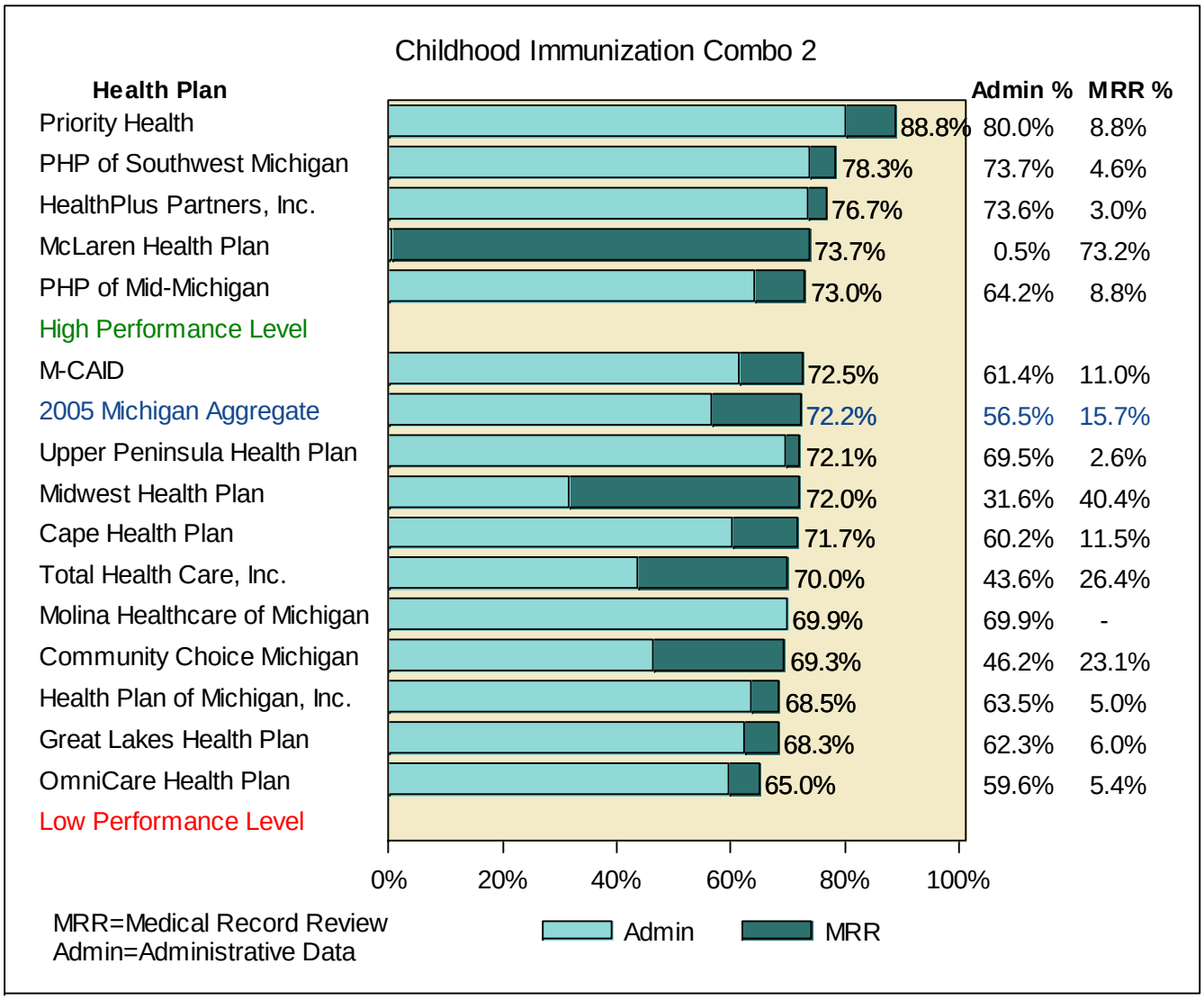
The 2005 Michigan Medicaid weighted average of 71.7 percent was 10.6 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 61.1 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant gain over 2004, up 4.3 percentage points. An increase of 11.3 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 60.4 percent.

Four health plans reached the HPL in 2004, while none of the health plans had rates below the LPL. Overall, the range of reported rates exhibited substantial improvement from 2004 to 2005.

Data Collection Analysis: Childhood Immunization Status—Combination #2

Figure 3-2—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Childhood Immunization Status—Combination #2



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

With the exception of Molina Healthcare of Michigan, all health plans elected to use the hybrid methodology. The 2005 Michigan aggregate administrative rate was 56.5 percent, and the medical record review rate was 15.7 percent.

The results indicate that 78.3 percent of the aggregate rate was derived from administrative data and 21.7 percent from medical record review. In 2004, 72.6 percent was derived from administrative data.

Twelve health plans that used the hybrid methodology derived more than half of their rates from administrative data, while one health plan derived less than 5 percent of its rate from administrative data.

A gradual increase in the completeness of the administrative data for this measure has been observed. This finding is not surprising, given the widespread use of the MCIR.

Adolescent Immunization Status

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-zoster virus, hepatitis B, measles, and rubella), partly because many immunization programs have placed less emphasis on improving vaccination coverage among adolescents.

Each year, more than 70 percent of the estimated 125,000 new cases of hepatitis B affect adolescents and young adults.[3-8] Immunizations effectively and efficiently reduce the occurrence of harmful and costly diseases. For every dollar spent, savings can range from $2.20 for hepatitis B to as high as $13 for the MMR vaccine.[3-9]

Key measures in this section include:

- *Adolescent Immunization Status—Combination #1*
- *Adolescent Immunization Status—Combination #2*

These are commonly referred to as *Combo 1* and *Combo 2*.

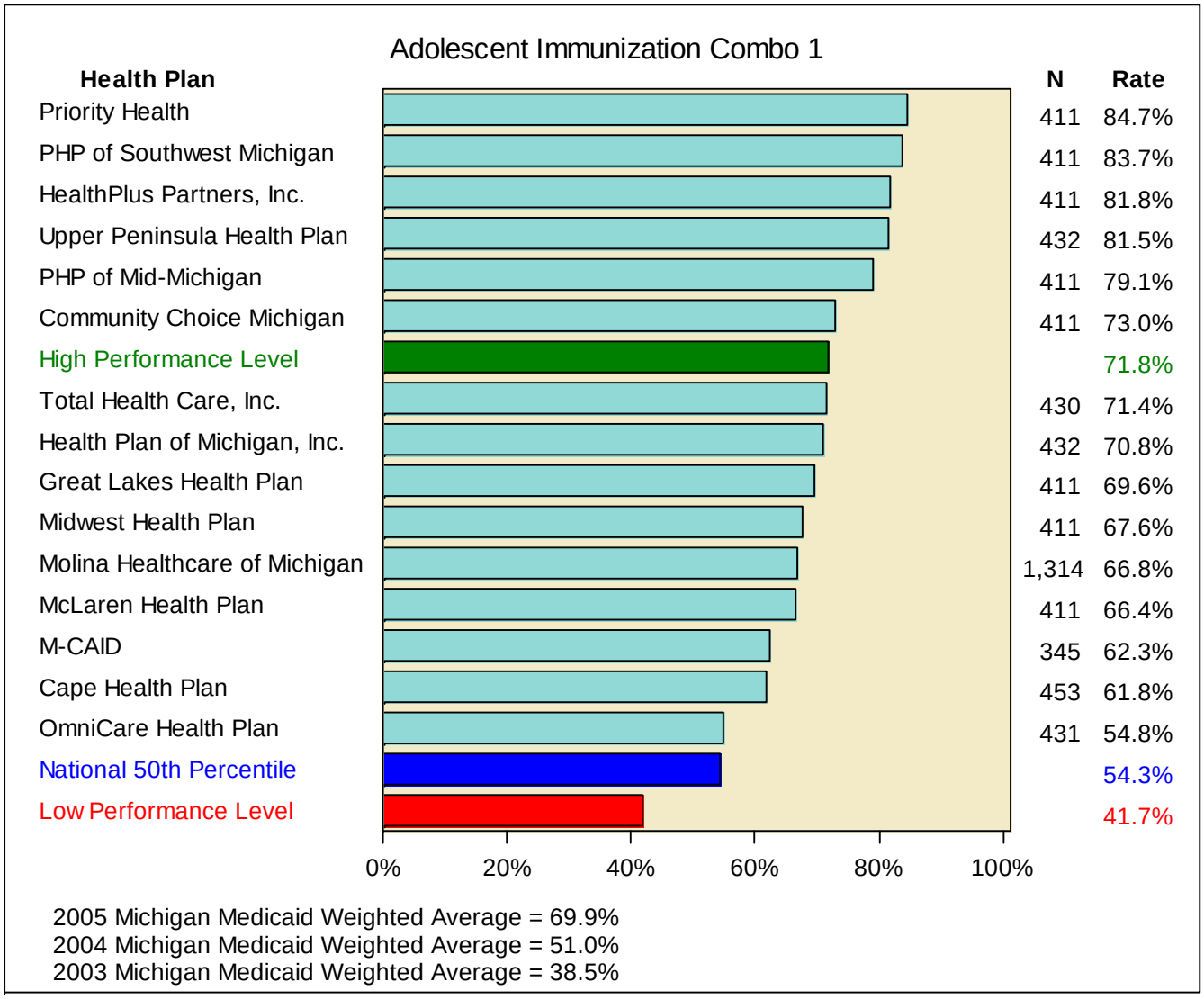
HEDIS Specification: Adolescent Immunization Status—Combination #1

Adolescent Immunization Status—Combination #1 calculates the percentage of enrolled adolescents who turned 13 years old during the measurement year, who were continuously enrolled for 12 months immediately prior to their 13th birthdays, and who were identified as having had a second dose of MMR and three hepatitis B vaccinations within the allowed time period and by the member's 13th birthday.

[3-8] National Committee for Quality Assurance. *The State of Managed Care Quality. 2003* (Standard Version). Washington, DC: National Committee for Quality Assurance: 2003, p.23.
[3-9] Iowa Department of Public Health. "Ch. 10: Immunization and Infectious Diseases," *Healthy Iowans 2010.*

Health Plan Ranking: Adolescent Immunization Status—Combination #1

Figure 3-3—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Adolescent Immunization Status—Combination #1



Six of the 15 health plans had rates above the HPL of 71.8 percent, and all health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

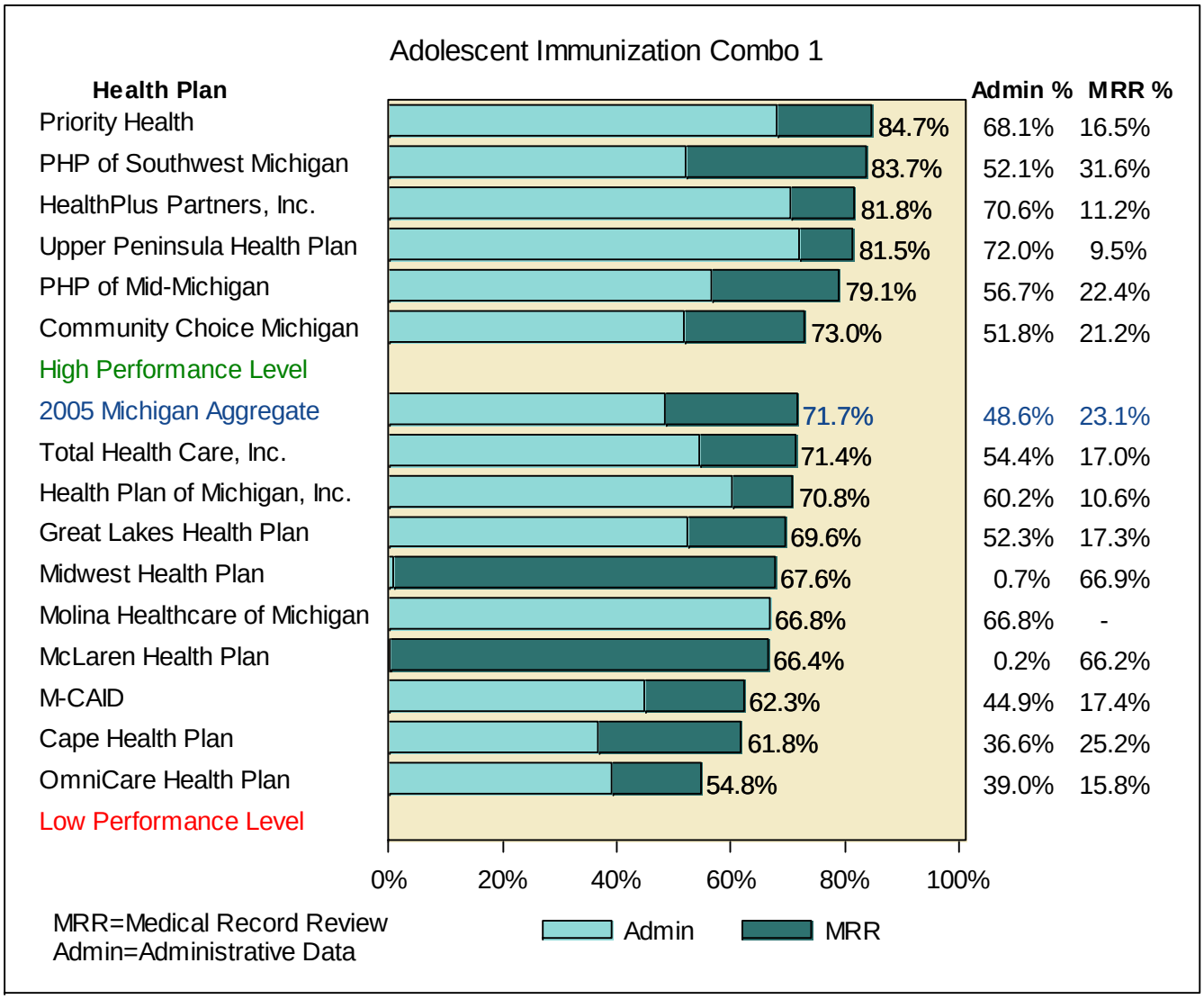
The 2005 Michigan Medicaid weighted average of 69.9 percent was 15.6 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 54.3 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004, up 18.9 percentage points. A gain of 31.4 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 38.5 percent.

The range of reported rates showed substantial improvement from 2004 to 2005, with all health plans demonstrating rates above the national HEDIS 2004 Medicaid 50th percentile. In 2004, none of the health plans reported rates above the HPL, and one health plan had a rate below the LPL.

Data Collection Analysis: Adolescent Immunization Status—Combination #1

Figure 3-4—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Adolescent *Immunization Status—Combination #1*



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

With the exception of Molina Healthcare of Michigan, all health plans with reported rates elected to use the hybrid methodology. The 2005 Michigan aggregate administrative rate was 48.6 percent, and the medical record review was 23.1 percent.

Overall, the results indicate that 67.8 percent of the aggregate rate was derived from administrative data and 32.2 percent from medical record review. In 2004, 54.4 percent of the aggregate rate was derived from administrative data.

Twelve health plans that used the hybrid methodology derived at least half of their rates from administrative data, while two health plans relied primarily on medical record review. These findings indicate that, overall, health plans' administrative immunization data are increasingly complete.

HEDIS Specification: Adolescent Immunization Status—Combination #2

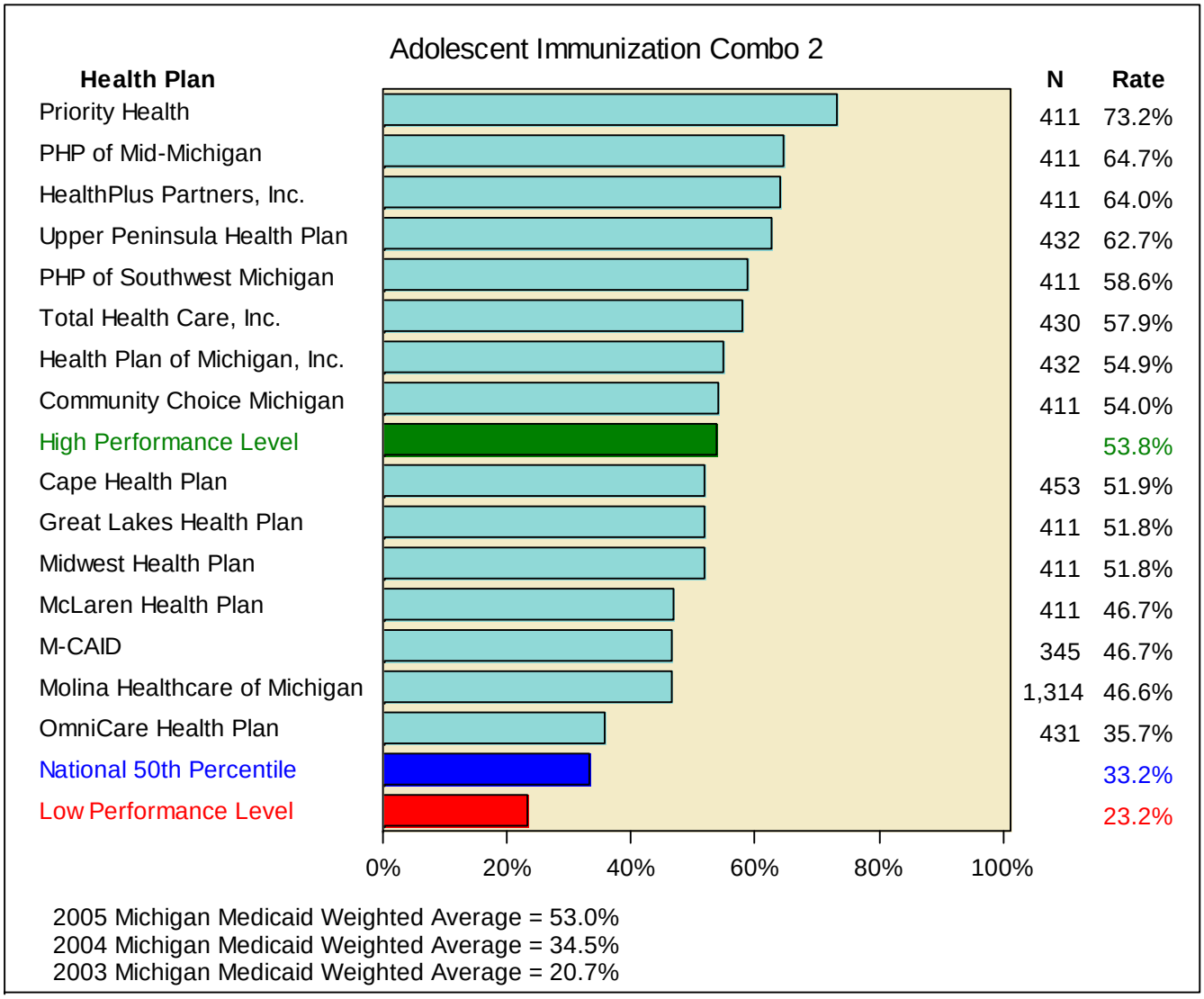
Adolescents are 10 times more likely than children to develop serious complications from varicella-zoster virus. The rate of complications is greatest for those individuals aged 15 years or older, yet a significant number of teens still do not receive VZVs.[3-10]

The *Adolescent Immunization Status—Combination #2* measure calculates the percentage of enrolled adolescents who turned 13 years old during the measurement year, who were continuously enrolled for 12 months immediately prior to their 13th birthdays, and who were identified as having had all of the vaccinations listed in Combination #1 and at least one VZV within the allowed time period and by the member's 13th birthday.

[3-10] National Committee for Quality Assurance. *The State of Managed Care Quality, 2001*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:26.

Health Plan Ranking: Adolescent Immunization Status—Combination #2

Figure 3-5—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Adolescent Immunization Status—Combination #2



Eight of the 15 health plans had rates above the HPL of 53.8 percent, and all health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

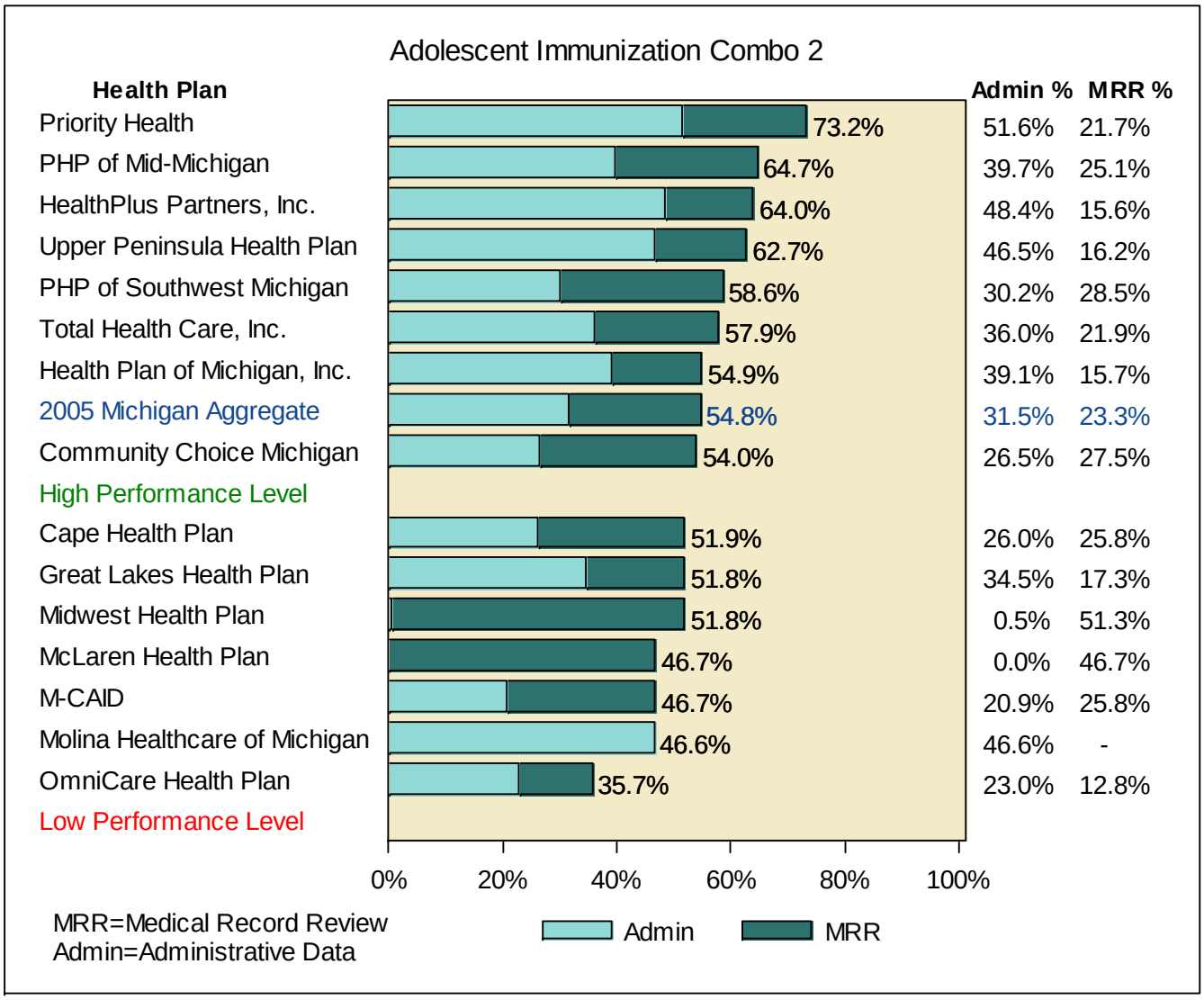
The 2005 Michigan Medicaid weighted average of 53.0 percent was 19.8 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 33.2 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004, up 18.5 percentage points. A gain of 32.3 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 20.7 percent.

The range of reported rates showed notable improvement from 2004 to 2005, with all health plans demonstrating rates above the national HEDIS 2004 Medicaid 50th percentile. In 2004, two health plans reported rates above the HPL, and one health plan had a rate below the LPL.

Data Collection Analysis: Adolescent Immunization Status—Combination #2

Figure 3-6—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Adolescent Immunization Status—Combination #2



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

With the exception of Molina Healthcare of Michigan, all health plans with reported rates elected to use the hybrid methodology. The 2005 Michigan aggregate administrative rate was 31.5 percent, and the medical record review was 23.3 percent.

The results illustrate that 57.5 percent of the aggregate rate was derived from administrative data and 42.5 percent from medical record review. In 2004, 42.0 percent of the aggregate rate was derived from administrative data. As with the other immunization measures, Michigan Medicaid administrative immunization data appear to be increasingly complete.

Eleven of the health plans derived at least half of their rates from administrative data, while two health plans relied primarily on medical record review.

Well-Child Visits in the First 15 Months of Life

The American Medical Association (AMA), the federal government's Bright Future program, and the American Academy of Pediatrics (AAP) all recommend comprehensive periodic well-child visits for children. These periodic checkups provide opportunities for addressing the physical, emotional, and social aspects of their health. These well-child visits also provide opportunities for the primary care providers to detect physical, developmental, behavioral, and emotional problems and provide early interventions and treatment and appropriate referrals to specialists. It is also recommended that clinicians use these visits to offer counseling and guidance to parents.

Michigan EPSDT requirements specify the components of age-appropriate well-child visits. The required components include review of the child's clinical history and immunization status, measuring height and weight, sensory screening, developmental assessment, anticipatory guidance, nutritional assessment, and testing for lead risk, tuberculosis, etc. Without these visits, children are at much greater risk of reaching their teenage years with developmental problems that have not been addressed. Although the HEDIS well-child visit measures do not directly collect performance data on individual EPSDT components rendered during a visit, the measures provide an indication of the amount of well-care visits delivered to children of various age groups.

Key measures include the following rates:

- *Well-Child Visits in the First 15 Months of Life—Zero Visits*
- *Well-Child Visits in the First 15 Months of Life—Six or More Visits*

The following pages analyze in detail the performance profile, health plan rankings, and data collection methodology used by the Michigan MHPs for the two rates reported for this key measure: *Zero Visits* and *Six or More Visits*.

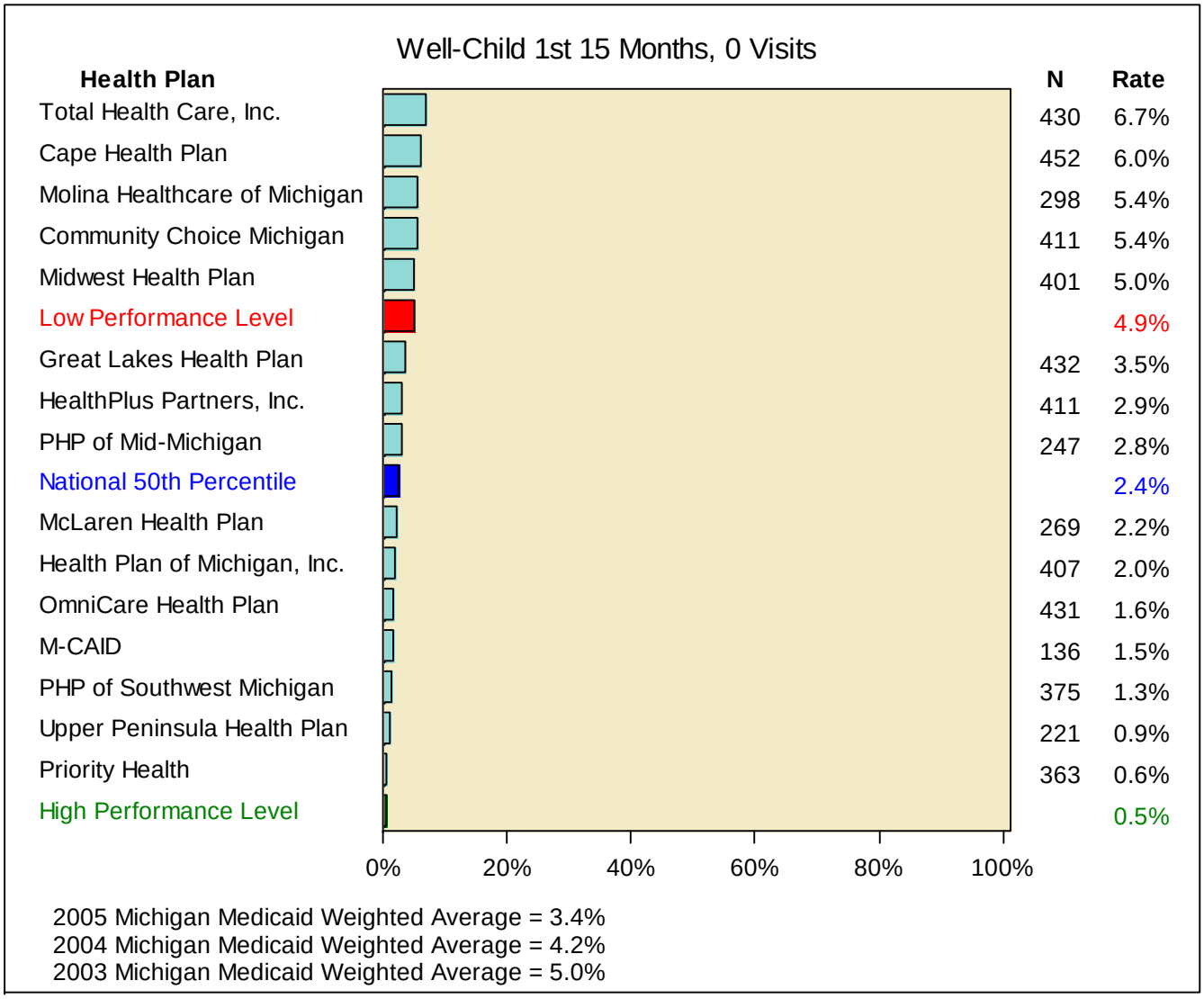
HEDIS Specification: Well-Child Visits in the First 15 Months of Life—Zero Visits

Well-Child Visits in the First 15 Months of Life—Zero Visits calculates the percentage of enrolled members who turned 15 months old during the measurement year, who were continuously enrolled in the Michigan MHP from 31 days of age, and who received zero visits with a primary care practitioner during their first 15 months of life.

It should be noted that limitations within the NCQA Data Submission Tool (DST), and differences in the way the health plans complete the DST, will impact any findings for data collection for this measure. Health plans may choose to attribute the finding of zero visits solely to administrative data sources, solely to medical record review, or to a combination of these. Any one of these approaches is acceptable; therefore, a comparison of data collection methods for this measure is not relevant and has not been included in this report.

Health Plan Ranking: Well-Child Visits in the First 15 Months of Life—Zero Visits

Figure 3-7—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Well-Child Visits in the First 15 Months of Life—Zero Visits



For this Key Measure, a *lower* rate indicates better performance, since low rates of Zero Visits indicate better care.

Figure 3-7 shows the percentage of children who received no well-child visits by age 15 months. For this measure, a *lower* rate indicates better performance.

None of the health plans had rates which exceeded the HPL of 0.5 percent, while five health plans had rates above the LPL of 4.9 percent. A total of seven health plans reported rates lower than the national HEDIS 2004 Medicaid 50th percentile, indicating better performance.

The 2005 Michigan Medicaid weighted average demonstrated improvement over 2004, down 0.8 of a percentage point, and improving by 1.6 percentage points from the 2003 Michigan Medicaid weighted average of 5.0 percent.

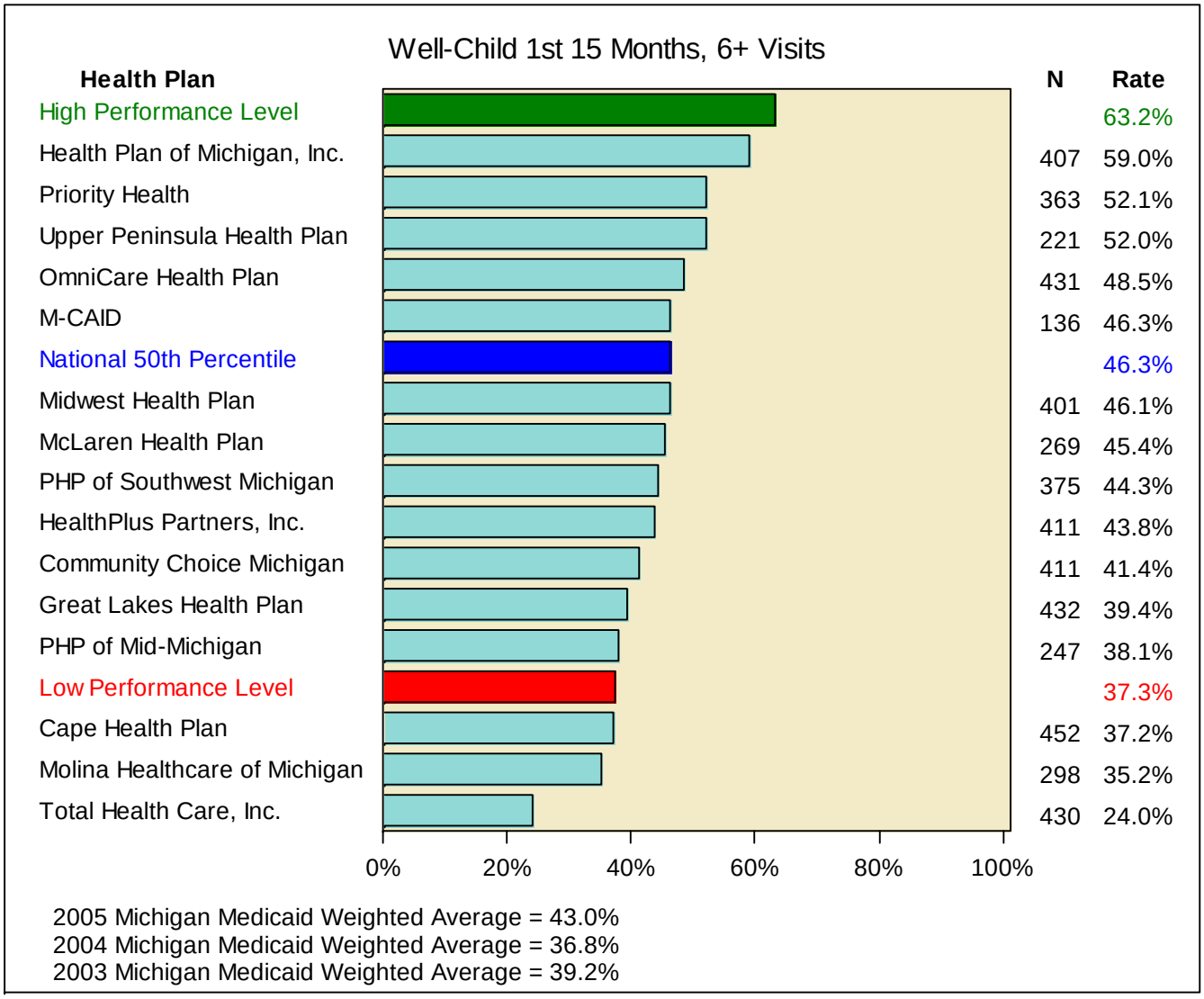
One health plan reported a rate that exceeded the HPL in 2004, and one health plan's rate was above the LPL. Overall, the range of reported rates showed no improvement from 2004 to 2005.

HEDIS Specification: Well-Child Visits in the First 15 Months of Life—Six or More Visits

Well-Child Visits in the First 15 Months of Life—Six or More Visits calculates the percentage of enrolled members who turned 15 months old during the measurement year, who were continuously enrolled in the Michigan MHP from 31 days of age, and who received six or more visits with a primary care practitioner during their first 15 months of life.

Health Plan Ranking: Well-Child Visits in the First 15 Months of Life—Six or More Visits

Figure 3-8—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Well-Child Visits in the First 15 Months of Life—Six or More Visits



None of the health plans reported rates above the HPL of 63.2 percent, while three health plans had rates below the LPL. A total of five health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

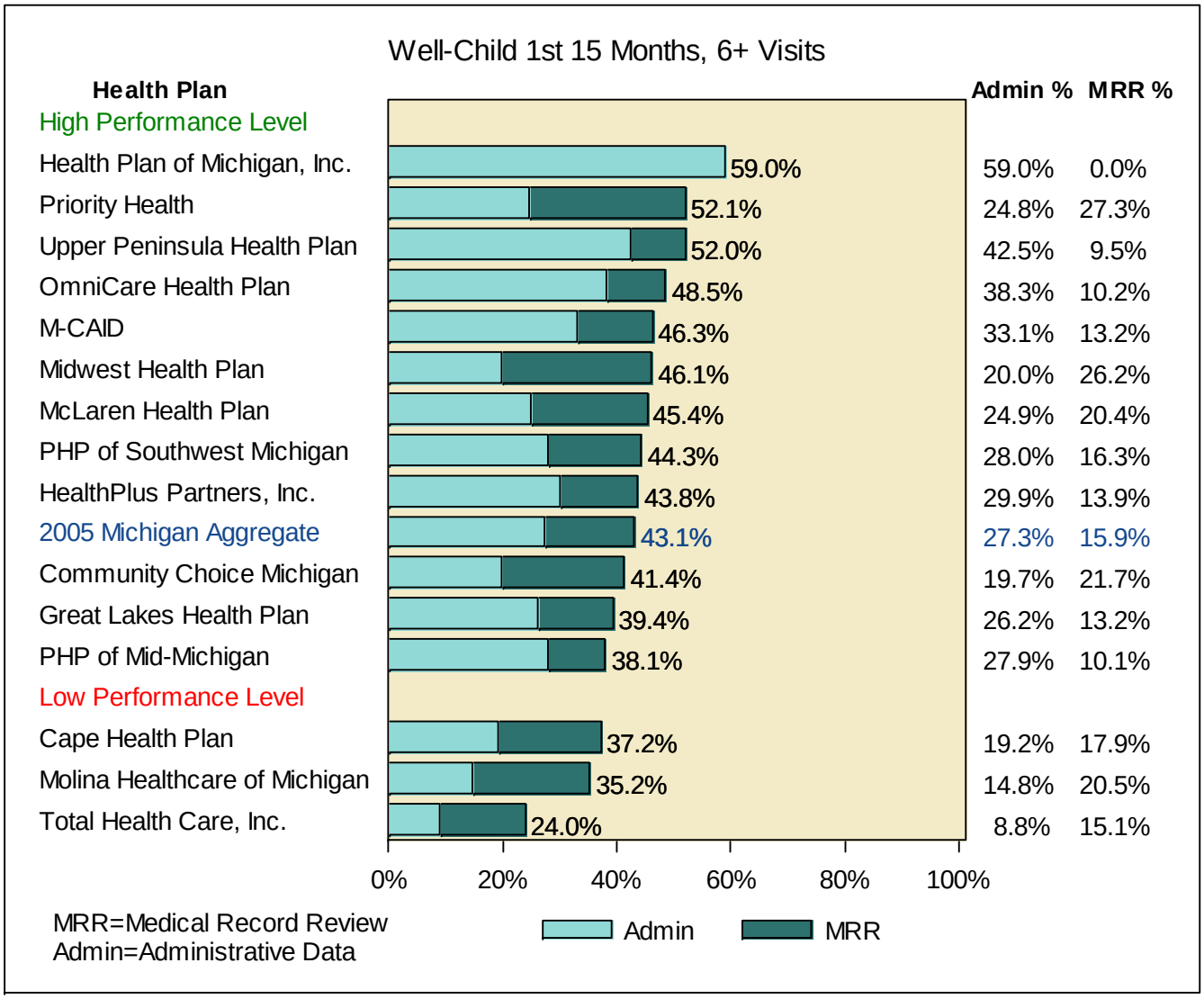
The 2005 Michigan Medicaid weighted average of 43.0 percent was 3.3 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 46.3 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 6.2 percentage points, and 3.8 percentage points higher than in 2003.

In 2004, one health plan reported a rate above the HPL, and five health plans had rates below the LPL. Overall, the range of reported rates showed a slight improvement from 2004 to 2005.

Data Collection Analysis: Well-Child Visits in the First 15 Months of Life—Six or More Visits

Figure 3-9—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Well-Child Visits in the First 15 Months of Life—Six or More Visits



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans reported this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 27.3 percent, and the medical record review was 15.9 percent.

Overall results show that 63.3 percent of the aggregate rate was derived from administrative data and 36.7 percent from medical record review. In 2004, 68.9 percent of the aggregate rate was derived from administrative data.

Ten of the 15 health plans derived at least half of their rates from administrative data. An additional health plan derived its aggregate rate entirely from administrative data.

Administrative data for this key measure appear relatively complete. This is not an uncommon finding since the numerator criteria are more stringent for medical record documentation than for an administrative data hit.

Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

The AAP recommends annual well-child visits for two- to six-year-olds. These checkup visits during the preschool and early school years allow clinicians to detect vision, speech, and language problems at the earliest opportunity. Early intervention in these areas can improve the child's communication skills and reduce language and learning problems.

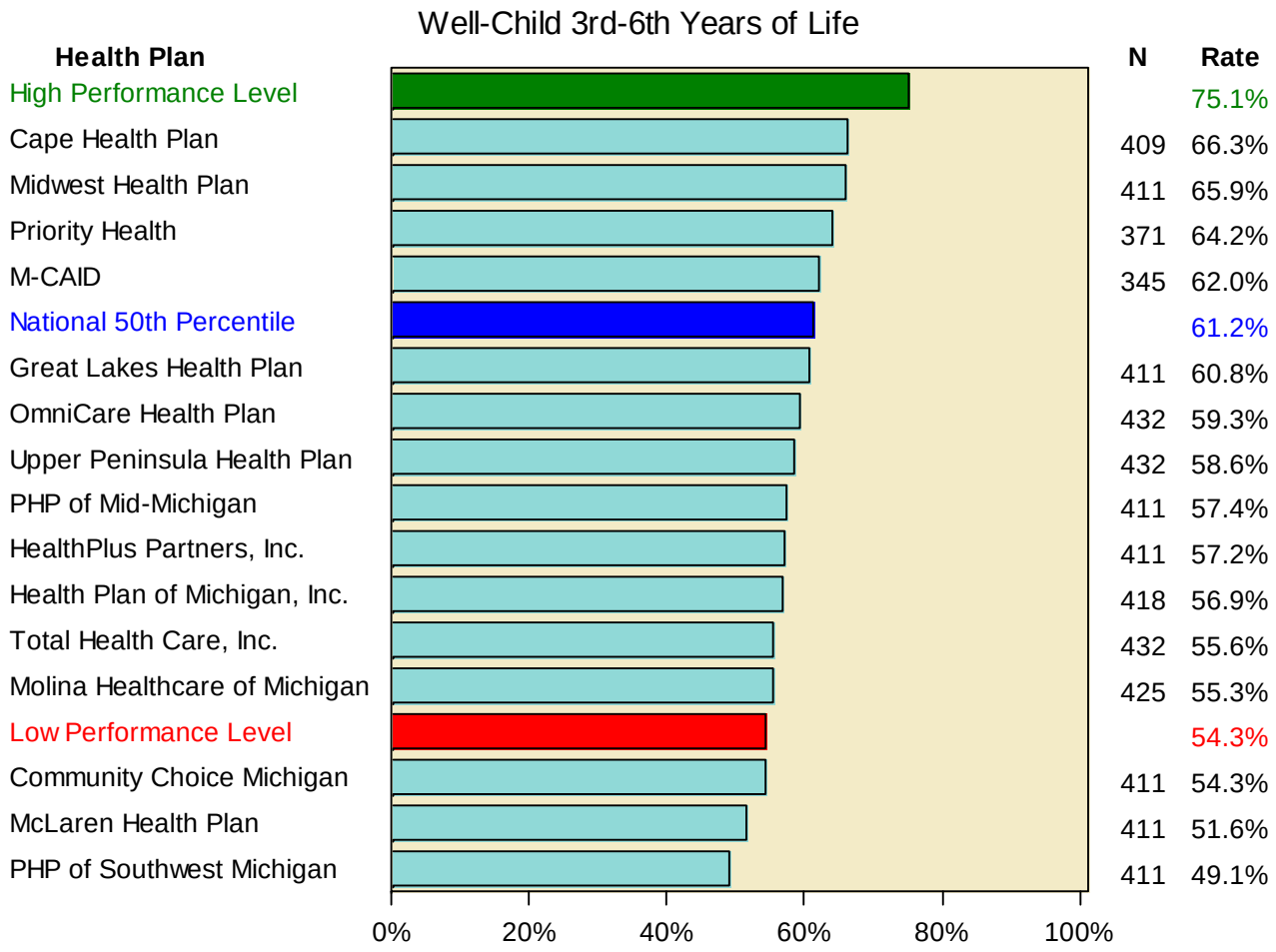
The following pages analyze the performance profile, health plan rankings, and data collection methodology used by the Michigan MHPs for *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*.

HEDIS Specification: Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

This key measure, *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*, reports the percentage of members who were three, four, five, or six years old during the measurement year; who were continuously enrolled during the measurement year; and who received one or more well-child visits with a primary care practitioner during the measurement year.

Health Plan Ranking: Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

Figure 3-10—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life



2005 Michigan Medicaid Weighted Average = 58.5%
2004 Michigan Medicaid Weighted Average = 55.3%
2003 Michigan Medicaid Weighted Average = 52.0%

None of the health plans met the HPL of 75.1 percent, while three health plans reported rates below the LPL of 54.3 percent. Four of the 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

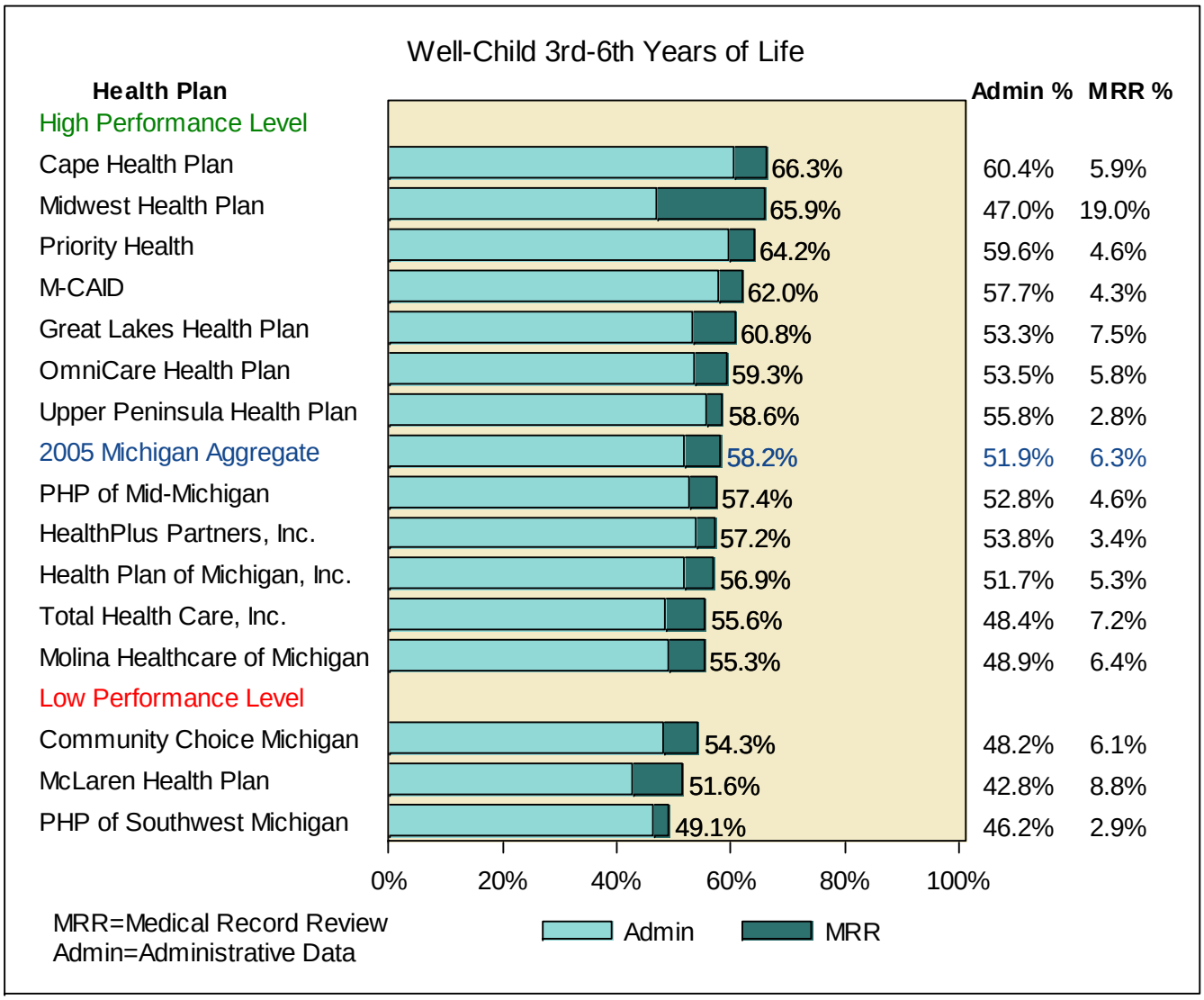
The 2005 Michigan Medicaid weighted average of 58.5 percent was 2.7 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 61.2 percent.

The 2005 Michigan Medicaid weighted average was 3.2 percentage points greater than in 2004. A gain of 6.5 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 52.0 percent.

None of the health plans reached the HPL in 2004, while two health plans had rates below the LPL. Overall, the range of reported rates showed no improvement in 2005 when compared to 2004.

Data Collection Analysis: Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

Figure 3-11—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans reported this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 51.9 percent, and the medical record review was 6.3 percent.

The results show that 89.2 percent of the aggregate rate was derived from administrative data and 10.8 percent from medical record review. In 2004, approximately 90.0 percent of the aggregate rate was derived from administrative data.

All of the health plans derived at least half of their rates from administrative data. One health plan increased its rate by 19 percentage points through medical record review.

Administrative data for this key measure appear to be very complete. This is likely due to the requirement for only one well-child visit per year for this age group, coupled with more stringent criteria for medical record documentation of the numerator event when compared to administrative data.

Adolescent Well-Care Visits

Unintentional injuries, homicide, and suicide are the leading causes of adolescent death. Sexually transmitted diseases, substance abuse, pregnancy, and antisocial behavior are important causes of physical, emotional, and social problems among adolescents. The AMA Guidelines for Adolescent Preventive Services (GAPS), the federal government's Bright Futures programs, and the AAP guidelines all recommend comprehensive annual health care visits for adolescents.

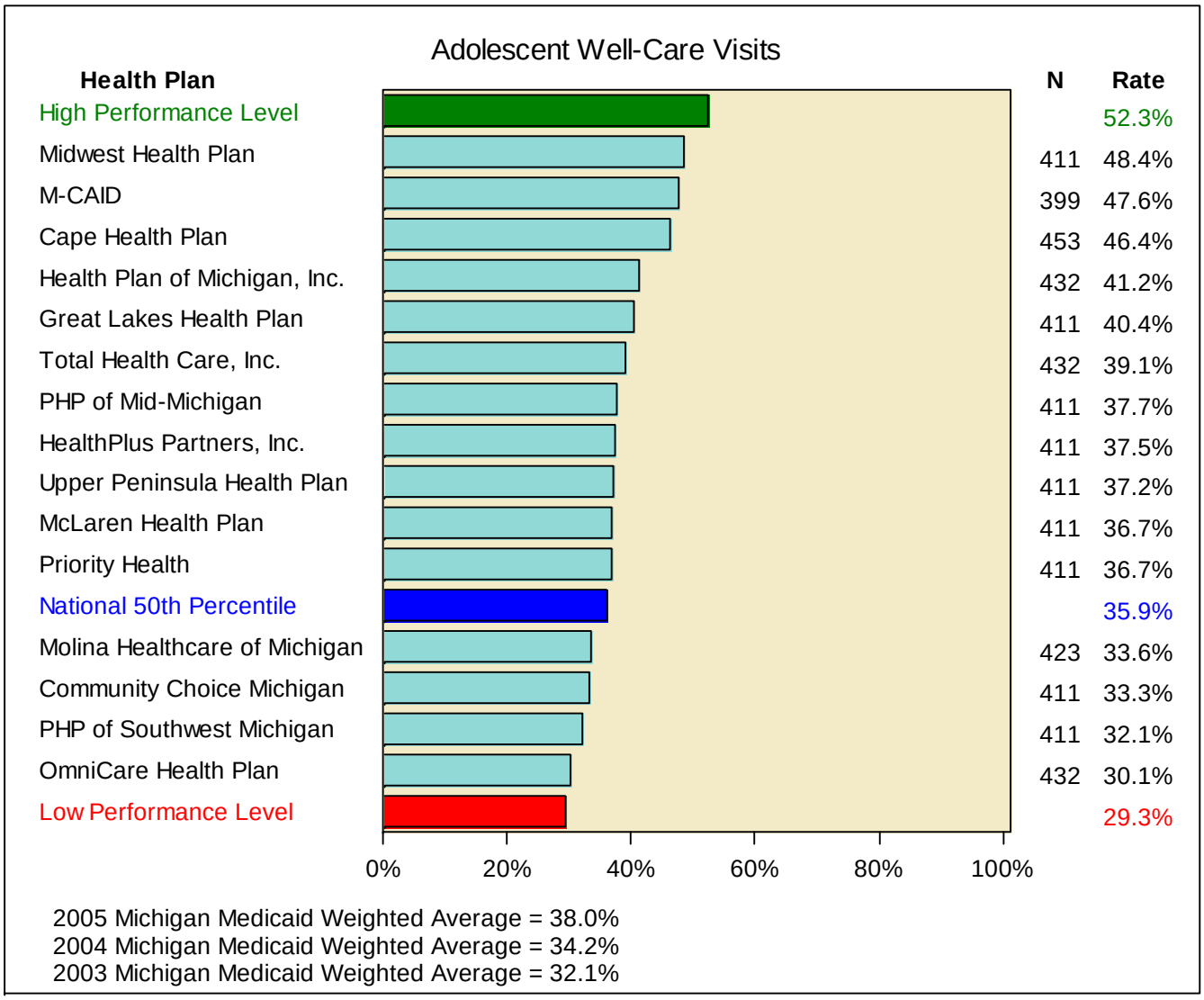
The following pages analyze the performance profile, health plan rankings, and data collection methodology used by the Michigan MHPs for *Adolescent Well-Care Visits*.

HEDIS Specification: Adolescent Well-Care Visits

This key measure reports the percentage of enrolled members who were 12 through 21 years of age during the measurement year, who were continuously enrolled during the measurement year, and who had at least one comprehensive well-care visit with a primary care practitioner or an obstetrics/gynecology (OB/GYN) practitioner during the measurement year.

Health Plan Ranking: Adolescent Well-Care Visits

Figure 3-12—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Adolescent Well-Care Visits



None of the health plans met the HPL of 52.3 percent, while 11 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

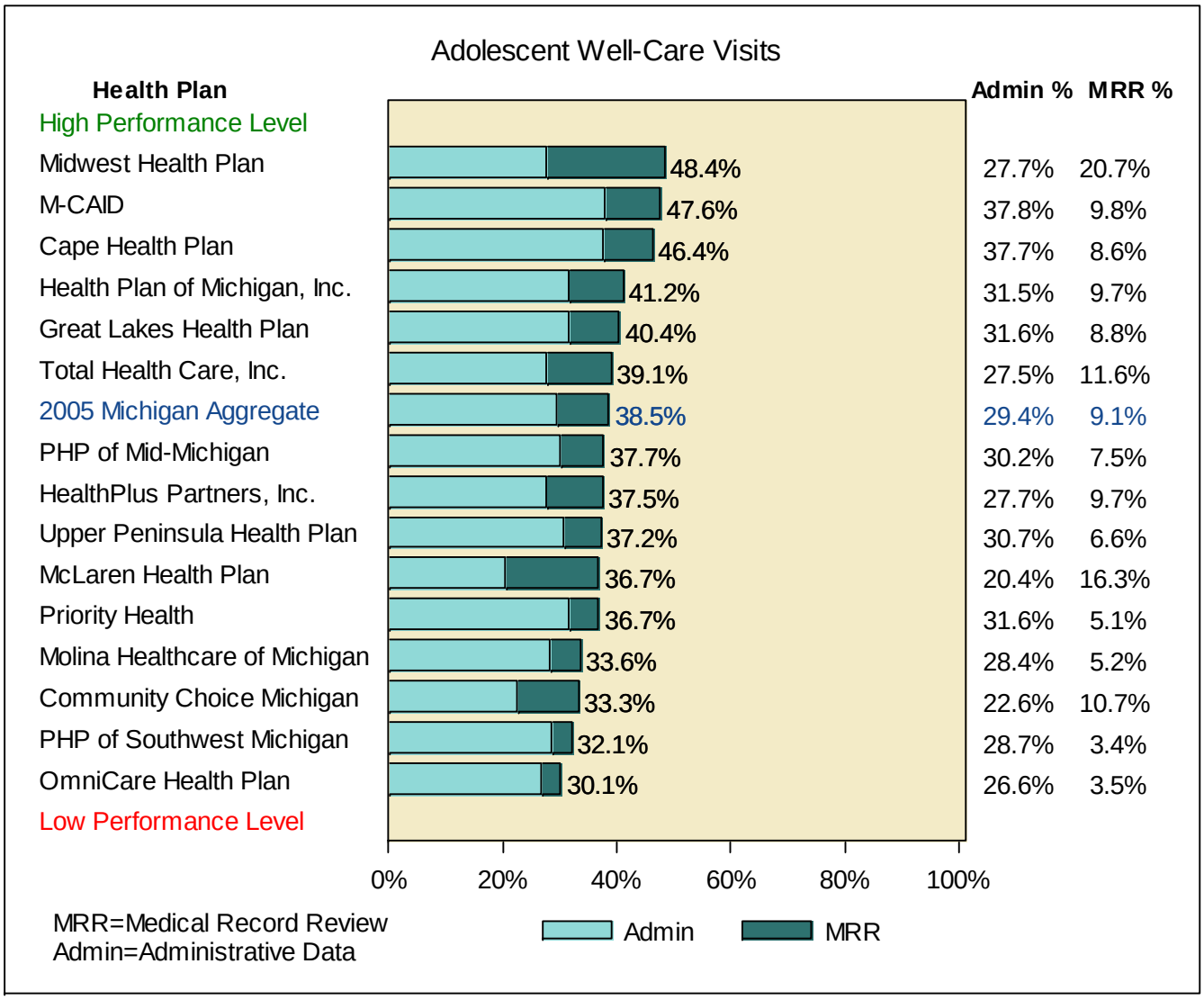
The 2005 Michigan Medicaid weighted average of 38.0 percent was 2.1 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 35.9 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 3.8 percentage points, and 5.9 percentage points higher than the 2003 Michigan Medicaid weighted average of 32.1 percent.

In 2005, overall improvement was observed with more health plans exceeding the national 50th percentile than in 2004.

Data Collection Analysis: Adolescent Well-Care Visits

Figure 3-13—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Adolescent Well-Care Visits



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans reported this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 29.4 percent, and the medical record review was 9.1 percent.

The results demonstrate that 76.4 percent of the aggregate rate was derived from administrative data and 23.6 percent from medical record review. In 2004, 76.8 percent of the aggregate rate was derived from administrative data.

All of the health plans derived at least half of their rates from administrative data. Four health plans increased their overall rates by more than 10 percentage points through medical record review.

Again, administrative data used to identify well-child visits appear to be relatively complete.

Appropriate Treatment for Children With Upper Respiratory Infection

Overuse of antibiotics to treat viral infections is a common concern across the health care industry today. The common cold (upper respiratory infection, or URI) is one of the top causes of school absenteeism, with most children having 6 to 10 colds per year.[3-11] The common cold is also the leading cause of doctors' visits for children, according to the National Institutes for Health. Antibiotics are not the recommended standard of practice for the treatment of the common cold; however, tens of millions of antibiotics are inappropriately prescribed for this condition.

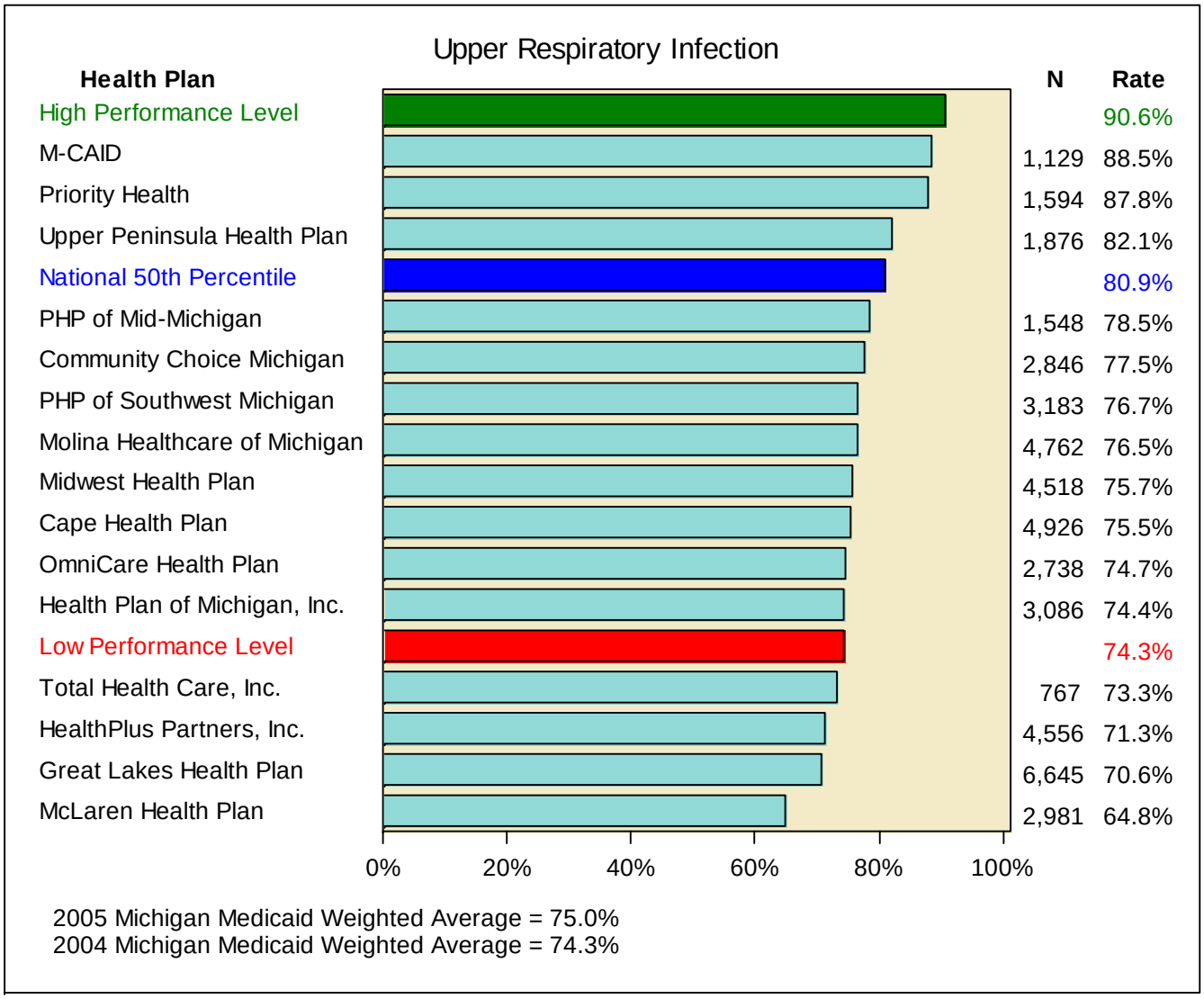
HEDIS Specification: Appropriate Treatment for Children with Upper Respiratory Infection

This key measure reports the percentage of enrolled members who were 3 months through 18 years of age during the measurement year, who were given a diagnosis of URI, and who were not dispensed an antibiotic prescription on or three days after the episode date.

[3-11] Mayo Foundation for Medical Education and Research. Children's Illness: Top 4 causes of missed school. Available at: http://www.mayoclinic.com/invoke.cfm?ID=CC00059. Accessed on: September 20, 2005.

Data Collection Analysis: Appropriate Treatment For Children With Upper Respiratory Infection

Figure 3-14—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Appropriate Treatment For Children With Upper Respiratory Infection



None of the health plans reported rates that met the HPL of 90.6 percent, while four health plans had rates below the LPL. Three health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 75.0 percent was 5.9 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 80.9 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 0.7 of a percentage point.

Pediatric Care Findings and Recommendations

The Michigan Medicaid managed care program is one of the leaders across the nation in childhood immunizations. All health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile. The weighted average is not far below the national 90th percentile, demonstrating strong performance across the state as a whole. Remarkably, a statistically significant increase in the weighted average was noted over last year's rate. Given the already high performance on this measure, real improvement becomes more difficult to attain. However, the health plans were able to accomplish this achievement. Also notable is the fact that unlike the national trend, Michigan's weighted average for *Childhood Immunization Status—Combination 2* exceeded both the Medicaid and commercial national averages for this measure.

Adolescent immunizations are also an area of strength for Michigan Medicaid managed care. The weighted averages for both the *Adolescent Immunization Status—Combination 1* and *Combination 2* key measures achieved a statistically significant improvement over 2004's result, and in addition, both were just below the national 90th percentile. The weighted averages for both measures almost doubled over the 2003 rate. This exceeds the national trend for improvement, in which an increase of 8 percentage points was observed for *Adolescent Immunization Status—Combination 1*. Again, the State's weighted average not only exceeded the national Medicaid average, but also exceeded the national commercial average for both key measures.

High performance in immunization rates is supported by the Michigan Childhood Immunization Registry (MCIR). Across each immunization measure, an analysis of the breakout of administrative and medical record data sources showed that administrative data are relatively complete for immunizations. With the mandatory reporting requirements and provider participation more than 80 percent, the MCIR is an invaluable source of immunization data, and a main driver of the high statewide performance.

High performance in the adolescent immunization rates was also likely boosted by another external factor. The State of Michigan Public Act 89 of 2000 required that the immunization status of all sixth grade children be assessed, beginning in the 2002-2003 school years. This legislation is likely to have further supported the results seen in the *Adolescent Immunization Status* key measures.

Statewide performance in the area of well-child visits is average. None of the health plans exceeded the HPL for any of the well-child related key measures. For the two younger age groups (birth to 15 months and ages three to six years), the weighted average was below the national HEDIS 2004 Medicaid 50th percentile and no statistically significant improvement was observed over last year. For adolescents, the results were better. The weighted average was above the national 50th percentile, and no health plans reported a rate below the LPL. Interestingly, an analysis of the breakout of administrative and medical record data sources showed that the administrative data for these measures is relatively complete. Because it does not appear that the average results are due to issues with data completeness, interventions should target member and provider behavior to improve performance. Health plans that furnish providers with routine lists of "at risk" members (members who are due for a preventive service but have not had one) as well as "silent" members (members who have never accessed services with their assigned PCP) for direct provider follow-up have demonstrated real improvement. Involvement of the MHP's medical director in improving well-child care visit rates by meeting directly with high-volume PCP offices can be a very powerful

tool. Finally, numerous studies have shown that the more sophisticated the information systems are within provider offices for tracking outstanding preventive services and missed appointments, the better performance is on these services. MHPs should be encouraged to provide ample support to their providers towards development of provider-office computer information systems.

For the Appropriate Treatment for Children with Upper Respiratory Infection, State performance leaves room for improvement. The Michigan Medicaid weighted average was below the national Medicaid 50th percentile. Interestingly, there is no difference between the Medicaid and commercial national averages for this key measure, suggesting that provider behavior is consistent regardless of payer source.

Appropriate preventive care is the key to providing quality pediatric care services. The Center for Health Care Strategies, Inc. (CHCS) published a toolkit aimed at improving preventive care pediatric services provided by Medicaid health plans. The toolkit includes a process improvement model, with lists of change strategies, and case studies of innovative pilot projects. Best practices are identified, in addition to approaches to providing better and more effective communication to both providers and health plan members. The toolkit, titled *Improving Preventive Care Services for Children—Best Clinical and Administrative Practices for Medicaid Health Plans*, is available at http://www.chcs.org/publications3960/publications_show.htm?doc_id=212873**.**

4. Women's Care

Introduction

This section of the report addresses how well Michigan MHPs are performing to ensure that women 16 to 64 years of age are screened early for cancer and sexually transmitted diseases (STDs), which are treatable if detected in the early stages. It also addresses how well Michigan MHPs are monitoring the appropriateness of prenatal and postpartum care.

The Women's Care dimension encompasses the following MDCH key measures:

- **Breast and Cervical Cancer Screening**
  - *Breast Cancer Screening*
  - *Cervical Cancer Screening*
- **Chlamydia Screening**
  - *Chlamydia Screening in Women—Ages 16 to 20 Years*
  - *Chlamydia Screening in Women—Ages 21 to 25 Years*
  - *Chlamydia Screening in Women—Combined Rate*
- **Prenatal and Postpartum Care**
  - *Prenatal and Postpartum Care—Timeliness of Prenatal Care*
  - *Prenatal and Postpartum Care—Postpartum Care*

The following pages provide detailed analysis of Michigan MHP performance and ranking, as well as data collection methodology used by Michigan MHPs for these measures.

Breast Cancer Screening

Breast cancer is one of the most common types of cancer among American women. In the United States, there will be an estimated 211,240 new cases of breast cancer and 40,870 deaths from breast cancer in 2005.[4-1] The American Cancer Society estimates that in 2005, 7,210 new cases of breast cancer will be diagnosed among women in Michigan.[4-1] While there has been a decline in the overall death rate in recent years, there is a significant racial disparity. Deaths among White women are declining, but deaths among African-American, Hispanic, Asian, and Native American women are not.[4-2]

If detected early, the five-year survival rate for localized breast cancer is 97 percent.[4-3] Mammograms can detect breast cancer an average of 1.7 years before the patient can feel a breast lump, and are the most effective method for detecting breast cancer in the early stages, when it is most treatable. However, in 2002, more than 45 percent of Michigan women aged 40 and older did not receive appropriately timed breast cancer screening.[4-4] Screening costs are low relative to the benefits of early detection. The average cost of treatment of early stage breast cancer is $11,000, rising to $140,000 for late stage treatment.[4-5]

HEDIS Specification: Breast Cancer Screening

The *Breast Cancer Screening* measure calculates the percentage of women aged 50 through 69 years who were continuously enrolled during the measurement year and the year prior to the measurement year, and who had a mammogram during the measurement year or the year prior to the measurement year.

[4-1] American Cancer Society, Cancer Facts & Figures 2005. Available at: http://www.cancer.org/downloads/STT/CAFF2005f4PWSecured.pdf Accessed on September 8, 2005.

[4-2] National Committee for Quality Assurance. *The State of Managed Care Quality, 2001*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:35.

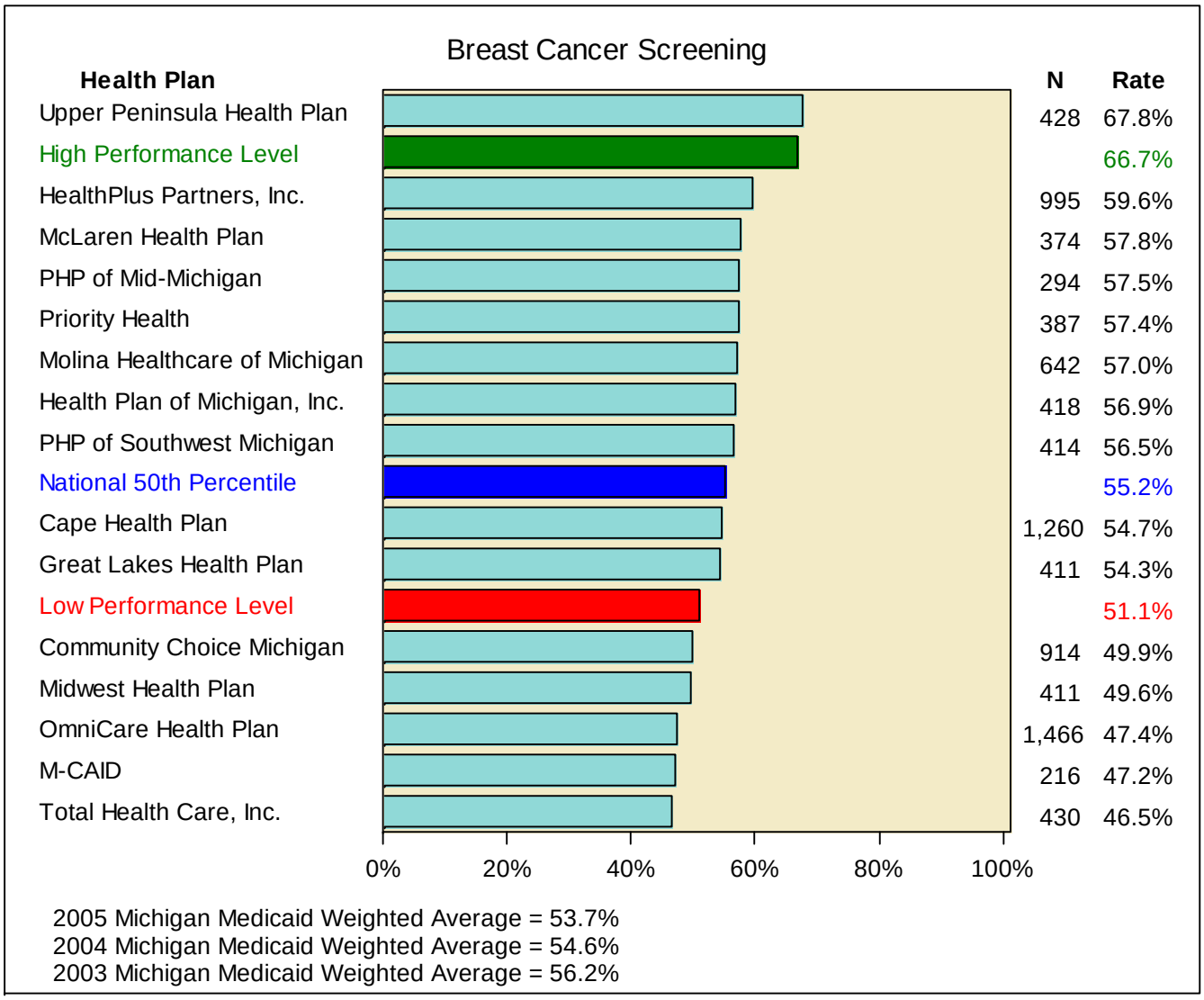
[4-3] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. The National Breast and Cervical Cancer Early Detection Program, 2003 Program Fact Sheet May 2004. Available at: http://www.cdc.gov/cancer/nbccedp/about.htm#facts. Accessed on September 9, 2005.

[4-4] Surgeon General's Health Status Report, Healthy Michigan 2010. Available at: http://www.michigan.gov/documents/Healthy_Michigan_2010_1_88117_7.pdf. Accessed on August 18, 2005.

[4-5] National Committee for Quality Assurance. *The State of Managed Care Quality, 2001*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:35.

Health Plan Ranking: Breast Cancer Screening

Figure 4-1—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Breast Cancer Screening



One health plan reported a rate above the HPL of 66.7 percent, while five health plans had rates below the LPL of 51.1 percent. A total of eight health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

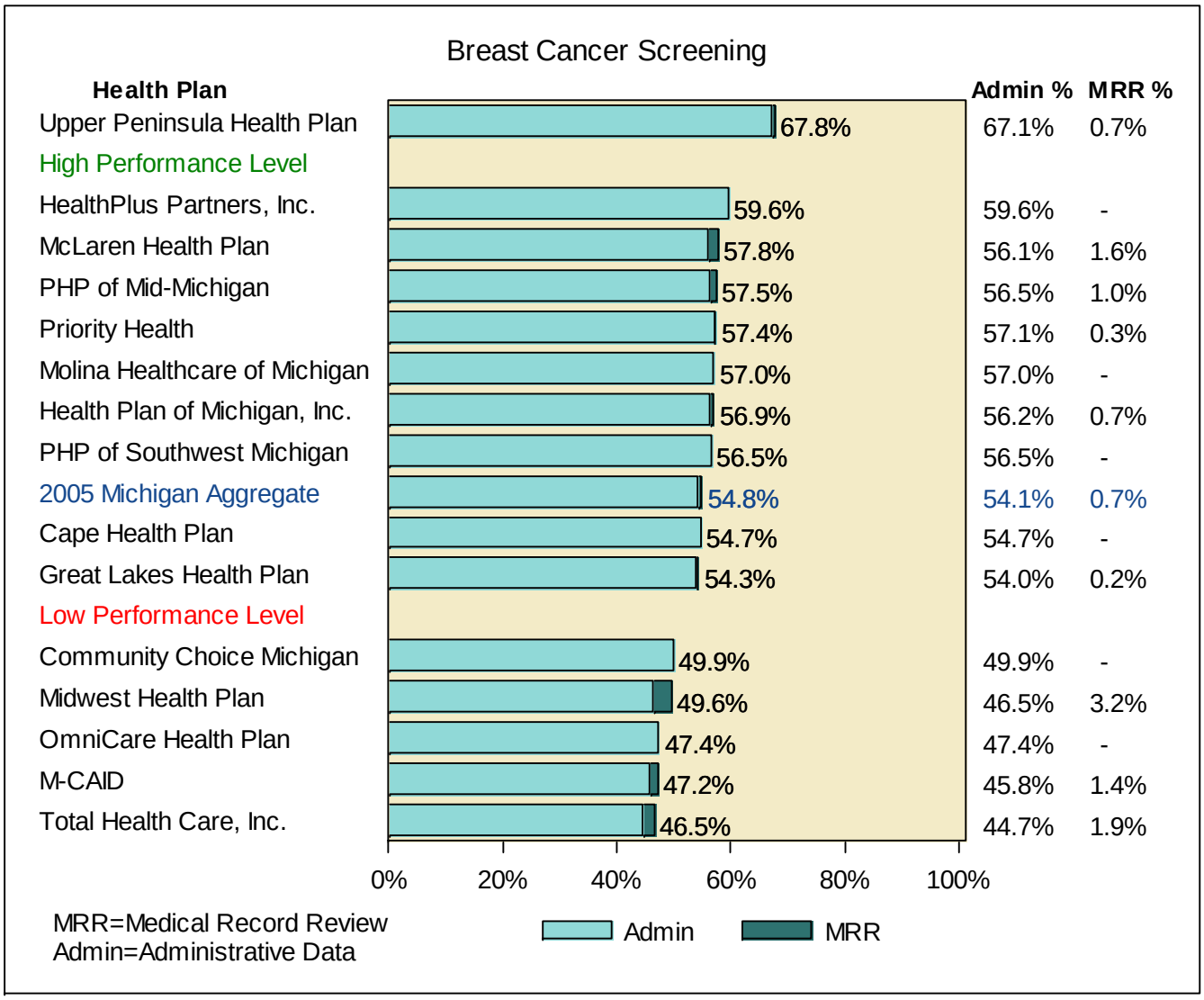
The 2005 Michigan Medicaid weighted average of 53.7 percent was 1.5 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 55.2 percent.

The 2005 Michigan Medicaid weighted average was lower than in 2004, down 0.9 of a percentage point and 2.5 percentage points below the 2003 Michigan Medicaid weighted average of 56.2 percent.

In 2004, two health plans reported rates that met the HPL and four had rates below the LPL. Overall, the range of reported rates did not show notable improvement in 2005.

Data Collection Analysis: Breast Cancer Screening

Figure 4-2—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Breast Cancer Screening



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

Six of the Michigan Medicaid health plans elected to report this measure using the administrative methodology, while nine health plans used the hybrid methodology. The 2005 Michigan aggregate administrative rate was 54.1 percent, and the medical record review was 0.7 percent.

The results illustrate that 98.7 percent of the aggregate rate was derived from administrative data. In 2004, 98.9 percent of the aggregate rate was derived from administrative data.

Michigan MHP administrative data used for the Breast Cancer Screening measure is very complete. Considering that for HEDIS 2006, NCQA has retired the hybrid method for this measure, performance for most MHPs should not be affected.

Cervical Cancer Screening

Cervical cancer is one of the most successfully treatable cancers when detected early. Since the incidence of cervical cancer increases with age, it is important that women continue to have screenings even though earlier tests have been negative. Almost 95 percent of Michigan women 18 years and older have received at least one Pap smear during their lifetimes. Eighty-six percent of Michigan women 18 and older have received a Pap smear within the past three years.[4-6] The American Cancer Society estimates that in 2005, 340 new cases of cervical cancer will be diagnosed among women in Michigan.[4-7] With screening, a woman's lifetime risk of cervical cancer is estimated to be only 0.7 percent.[4-8]

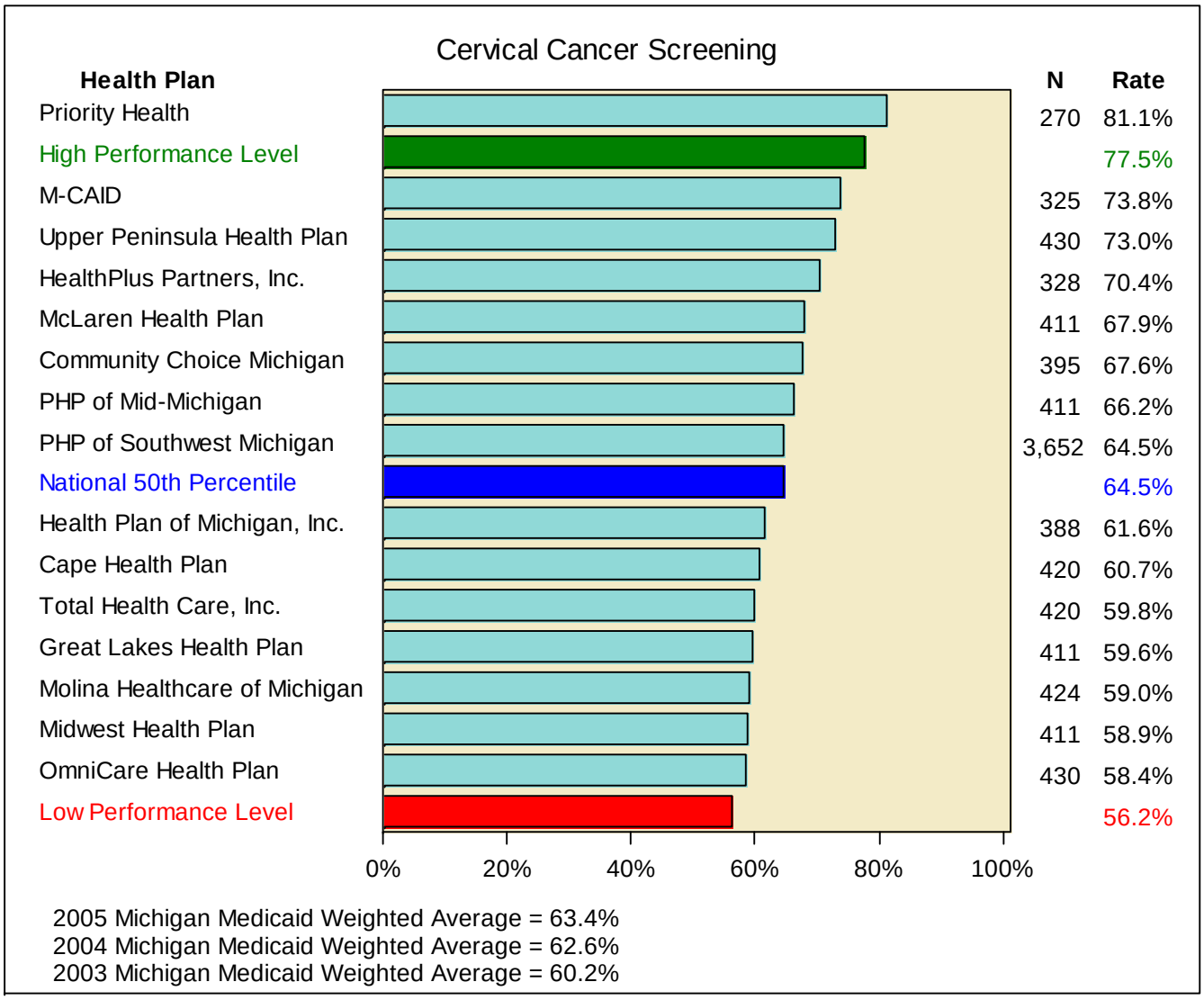
HEDIS Specification: Cervical Cancer Screening

The *Cervical Cancer Screening* measure reports the percentage of women aged 18 through 64 years who were continuously enrolled during the measurement year and who received one or more Pap tests during the measurement year or the two years prior to the measurement year.

[4-6] Michigan Department of Community Health: Facts about Cervical Cancer September 2002. Available at: http://www.michigan.gov/documents/CervicalFacts_6648_7.pdf. Accessed on August 18, 2005.
[4-7] American Cancer Society, Cancer Facts & Figures 2005. Available at: http://www.cancer.org/downloads/STT/CAFF2005f4PWSecured.pdf Accessed on September 8, 2005.
[4-8] National Committee for Quality Assurance. *The State of Health Care Quality. 2004* (Standard Version) Washington, DC: National Committee for Quality Assurance; 2004:28.

Health Plan Ranking: Cervical Cancer Screening

Figure 4-3—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Cervical Cancer Screening



One health plan reached the HPL of 77.5 percent, while none of the health plans reported rates below the LPL of 56.2 percent. Eight of the 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

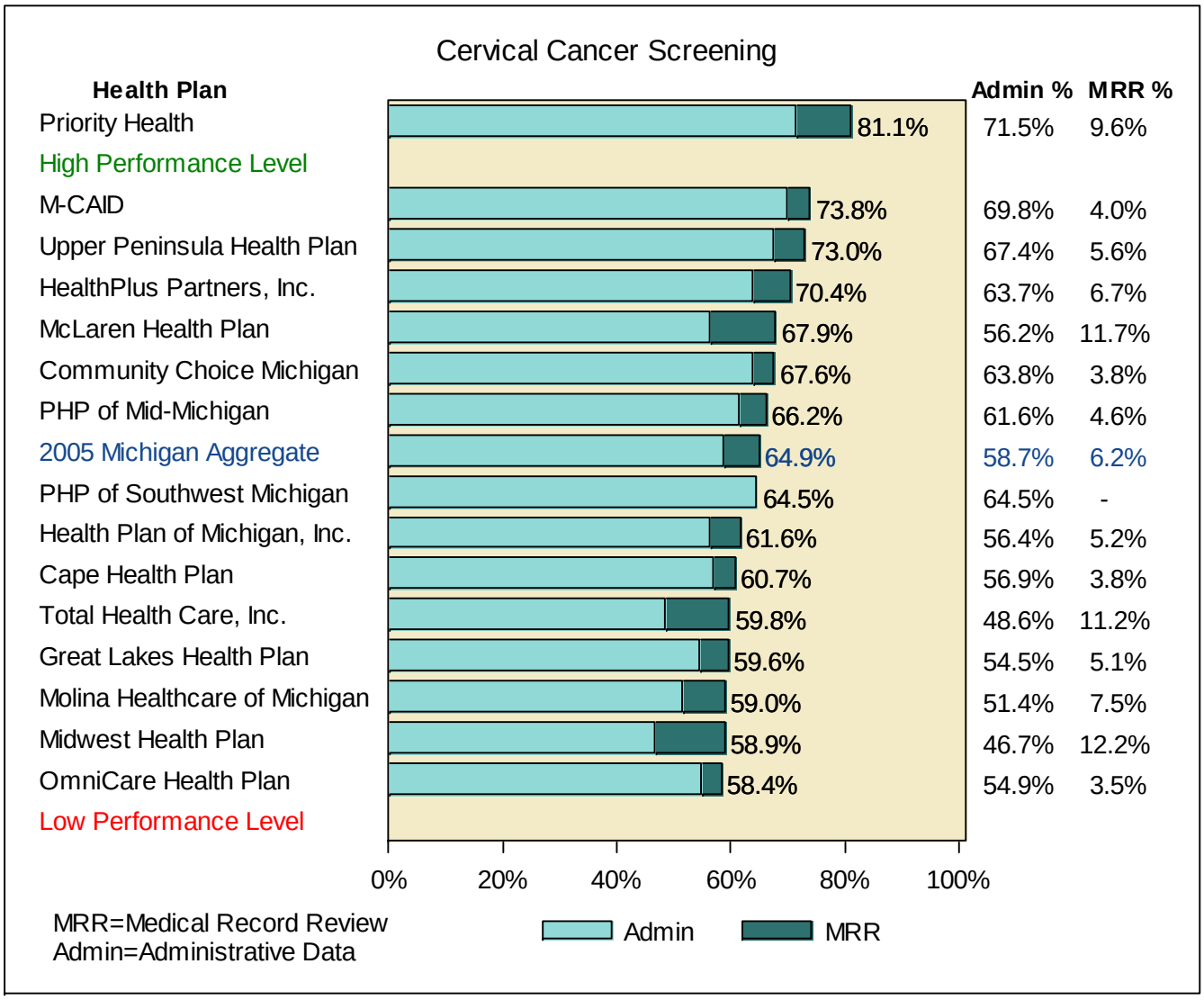
The 2005 Michigan Medicaid weighted average of 63.4 percent was 1.1 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 64.5 percent.

The 2005 Michigan Medicaid weighted average showed modest improvement from 2004, up 0.8 of a percentage point. A gain of 3.2 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 60.2 percent.

One health plan reached the HPL in 2004, while two health plans had rates below the LPL. Overall, the range of reported rates demonstrated notable improvement in 2005 when compared to 2004.

Data Collection Analysis: Cervical Cancer Screening

Figure 4-4—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Cervical Cancer Screening



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

Fourteen of the 15 Michigan Medicaid health plans reported this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 58.7 percent, and the medical record review was 6.2 percent.

The results indicate that 90.4 percent of the aggregate rate was derived from administrative data and 9.6 percent from medical record review. In 2004, 88.0 percent of the aggregate rate was derived from administrative data.

All of the health plans derived at least half of their rates from administrative data. Three health plans increased their overall rates by more than 10 percentage points through medical record review.

Analysis of the findings indicates that MHP administrative data for the Cervical Cancer Screening measure is relatively complete, although a small number of MHPs (those that derived more than 10 percent of their numerator events from medical record review) should explore reasons why their data are not as complete as a majority of the others.

Chlamydia Screening in Women

There are approximately 3 million new cases of chlamydia annually, making it the most common STD in the United States. Chlamydia can be successfully treated with antibiotics. Untreated Chlamydia increases the risk for pelvic inflammatory disease (PID), infertility, ectopic pregnancy, and HIV infection, yet women who are infected have no obvious symptoms. Chlamydia screening programs have successfully decreased the incidence of PID in young women by 60 percent.[4-9]

Nearly 80 percent of women infected are 24 years of age or younger.[4-10] In 2004, 12,171 cases were reported among Michigan women aged 20 to 24 years, an increase of 2,683 new cases when compared to 2003. In addition, this represents approximately 37 percent of the 32,625 reported cases of Michigan women with chlamydia in 2004.[4-11]

HEDIS Specification: Chlamydia Screening in Women

The *Chlamydia Screening in Women* measure is reported using the administrative method only. The measure is reported by three separate rates: *Chlamydia Screening in Women—Ages 16 to 20 Years*, *Chlamydia Screening in Women—Ages 21 to 25 Years*, and *Chlamydia Screening in Women—Combined Rate* (the total of both age groups, ages 16 to 25 years).

The *Chlamydia Screening in Women—Ages 16 to 20 Years* rate calculates the percentage of women aged 16 through 20 years who were identified as sexually active, who were continuously enrolled during the measurement year, and who had at least one test for chlamydia during the measurement year.

Chlamydia Screening in Women—Ages 21 to 25 Years reports the percentage of women aged 21 through 25 years who were identified as sexually active, who were continuously enrolled during the measurement year, and who had at least one test for chlamydia during the measurement year.

The *Chlamydia Screening in Women—Combined Rate* reports the sum of both groups, i.e., the two numerators divided by the sum of the denominators. Therefore, the *Chlamydia Screening in Women—Combined Rate* reports the percentage of women aged 16 through 25 years who were sexually active, who were continuously enrolled during the measurement year, and who had at least one test for chlamydia during the measurement year.

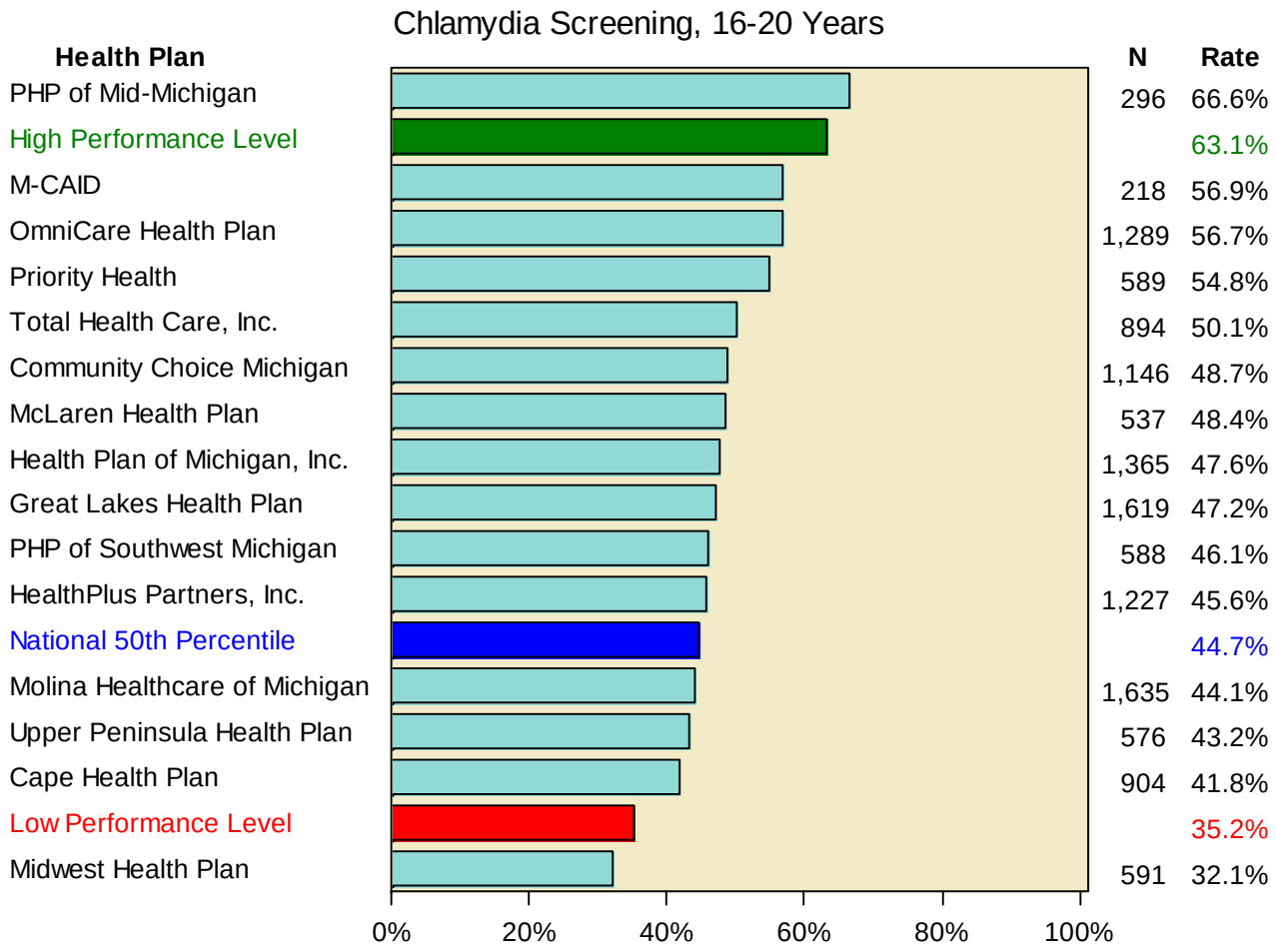
[4-9] National Committee for Quality Assurance. *The State of Health Care Quality, 2004* (Standard Version). Washington, DC: National Committee for Quality Assurance; 2004:30.

[4-10] University of Michigan Health System. Women need testing and care for infection that can steal fertility expert says [press release]. University of Michigan; March 26, 2001.

[4-11] Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health. Available at: http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/SD04ST4A.ASP. Accessed on September 13, 2005.

Health Plan Ranking: Chlamydia Screening in Women—Ages 16 to 20 Years

Figure 4-5—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Chlamydia Screening in Women—Ages 16 to 20 Years



One health plan had a rate above the HPL of 63.1 percent, while one health plan reported a rate below the LPL of 35.2 percent. A total of 11 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

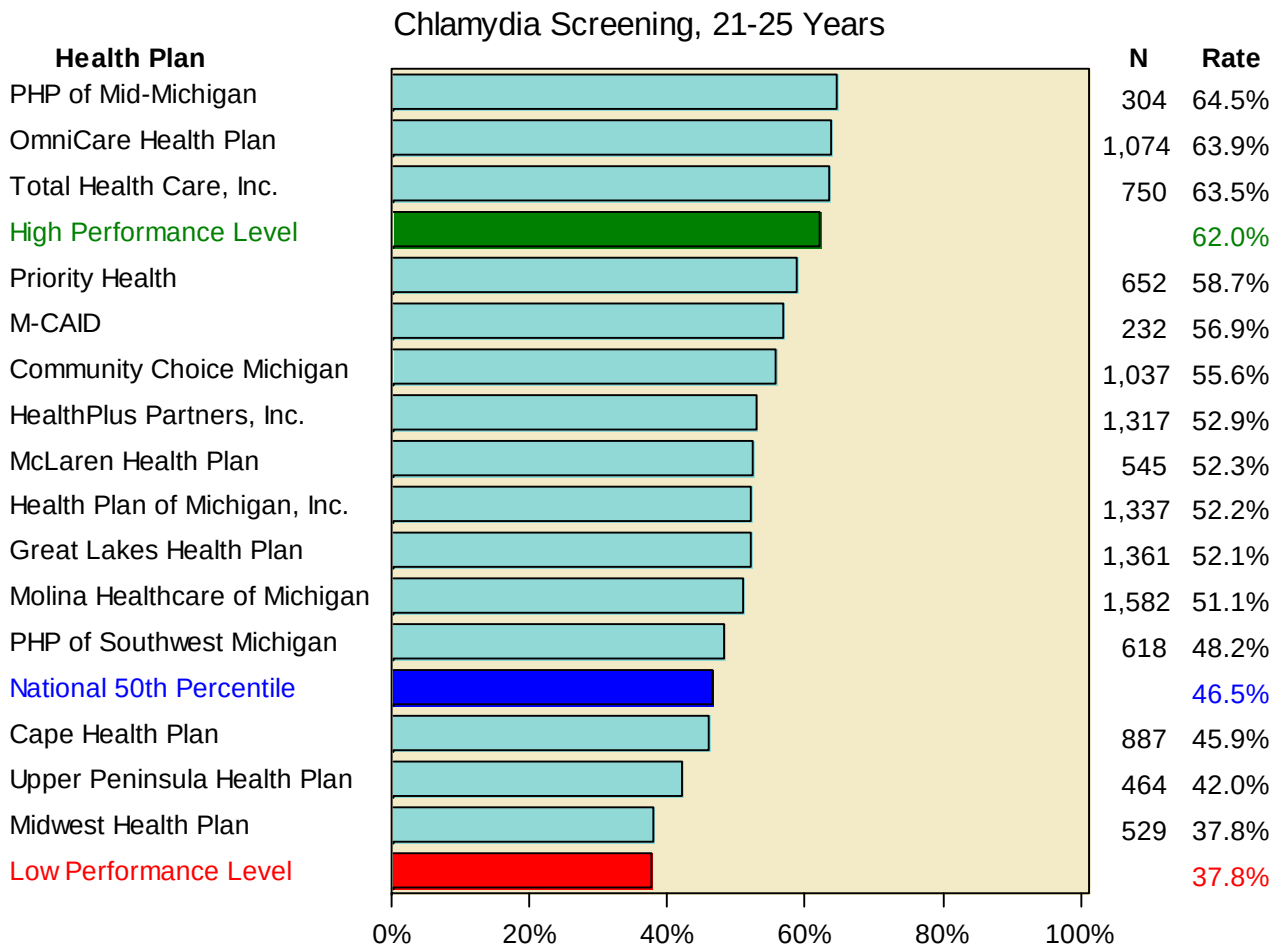
The 2005 Michigan Medicaid weighted average of 47.6 percent was 2.9 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 44.7 percent.

The 2005 Michigan Medicaid weighted average showed a slight decrease from 2004, down 0.6 percentage points. A gain of 5.5 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 42.1 percent.

In 2004, two health plans reported rates above the HPL, and one health plan had a rate below the LPL. Overall, the range of reported rates showed minimal improvement in 2005 when compared to 2004.

Health Plan Ranking: Chlamydia Screening in Women—Ages 21 to 25 Years

Figure 4-6—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Chlamydia Screening in Women—Ages 21 to 25 Years



Three health plans had rates above the HPL of 62.0 percent, while none of the health plans had reported rates below the LPL of 37.8 percent. A total of 12 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

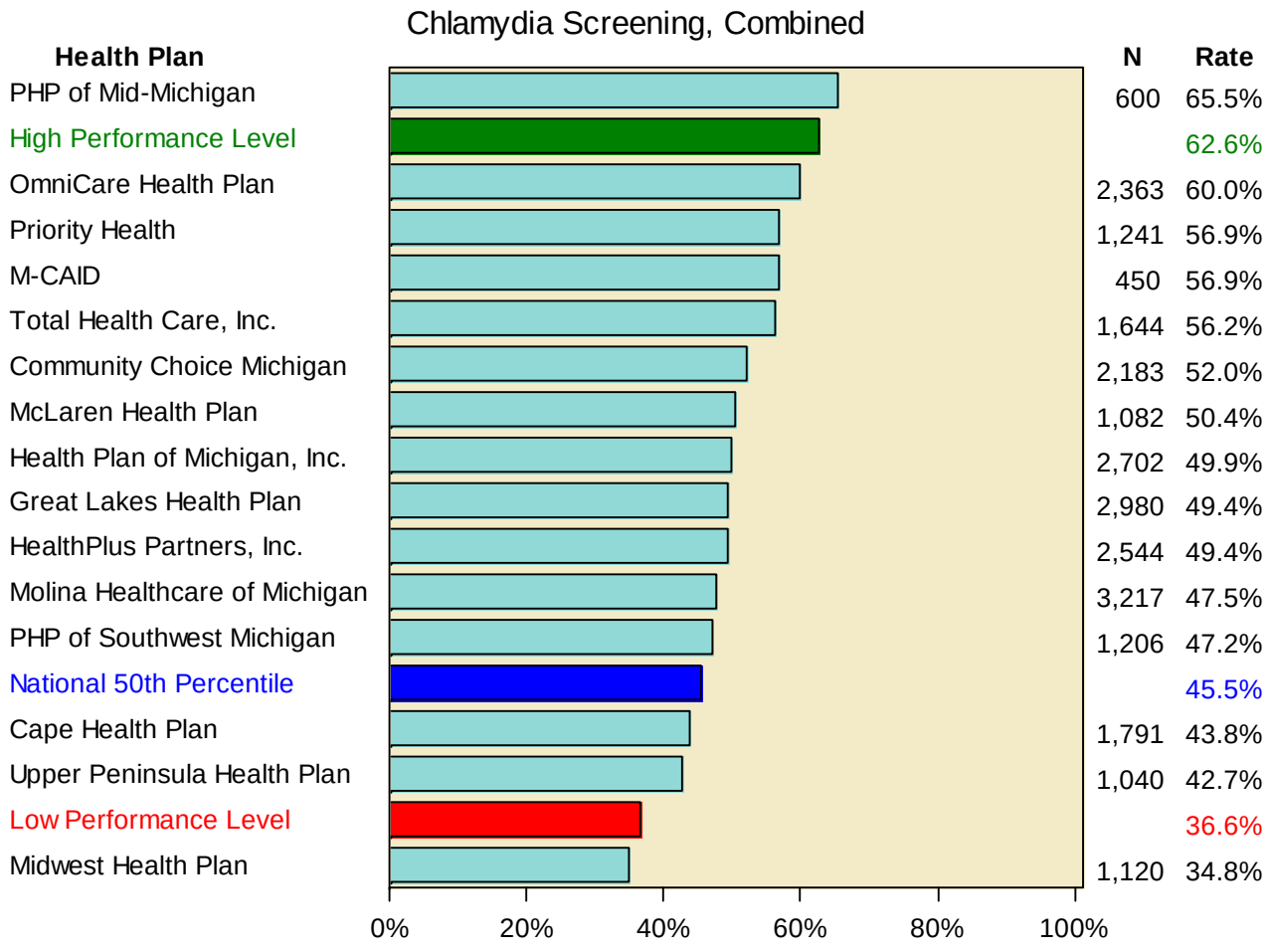
The 2005 Michigan Medicaid weighted average of 53.1 percent was 6.6 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 46.5 percent.

The 2005 Michigan Medicaid weighted average showed a slight decrease from 2004, down 0.7 of a percentage point. A gain of 7.2 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 45.9 percent.

Three health plans reported rates above the HPL in 2004, and none of the health plans had rates below the LPL. No improvement was observed in the range of reported rates from 2004 to 2005.

Health Plan Ranking: Chlamydia Screening in Women—Combined Rate

Figure 4-7—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Chlamydia Screening in Women—Combined Rate



One health plan had a rate above the HPL of 62.6 percent, while one health plan reported a rate below the LPL of 36.6 percent. A total of 12 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 50.3 percent was 4.8 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 45.5 percent.

The 2005 Michigan Medicaid weighted average showed a modest decrease from 2004, down 0.6 of a percentage point. A gain of 6.1 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 44.2 percent.

Two health plans reported rates above the HPL in 2004, and none of the health plans had rates below the LPL. No notable improvement was observed in the range of reported rates from 2004 to 2005.

Prenatal and Postpartum Care

There are nearly 4 million births annually in the United States. More than 6 percent of these infants are born weighing less than five pounds, and these babies are four times more likely to die prematurely than infants with a normal weight at birth.[4-12] In 2003, 8.2 percent of Michigan infants were born with low birth weight.[4-13] Several studies show a positive relationship between comprehensive prenatal care and reduction in low birth weight and infant mortality. HEDIS measures two important components of care: timeliness of prenatal care and health care for the mother and child up to 56 days after delivery.

Michigan ranks 42nd nationally in infant mortality and the disparity among rates for different racial groups is increasing.[4-14] In 2003, the infant mortality rate for African-Americans was 17.5 per 1,000 live births, while for Whites it was 6.7 per 1,000 live births.[4-15] Adequate prenatal care, including initiating care in the first trimester and receiving regular care until delivery, can result in fewer birth complications and healthier babies.

This key measure examines whether or not care is available to members when needed and whether that care is provided in a timely manner. The measure consists of two numerators: Timeliness of Prenatal Care and Postpartum Care, giving rise to the MDCH key measure names:

- *Prenatal and Postpartum Care—Timeliness of Prenatal Care*
- *Prenatal and Postpartum Care—Postpartum Care*

HEDIS Specification: Prenatal and Postpartum Care—Timeliness of Prenatal Care

The *Timeliness of Prenatal Care* measure calculates the percentage of women who delivered a live birth between November 6 of the year prior to the measurement year and November 5 of the measurement year, who were continuously enrolled at least 45 days prior to delivery through 56 days after delivery, and who received a prenatal care visit as a member of the MHP in the first trimester or within 42 days of enrollment in the MHP.

[4-12] National Committee for Quality Assurance. *The State of Managed Care Quality, 2001*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:57.

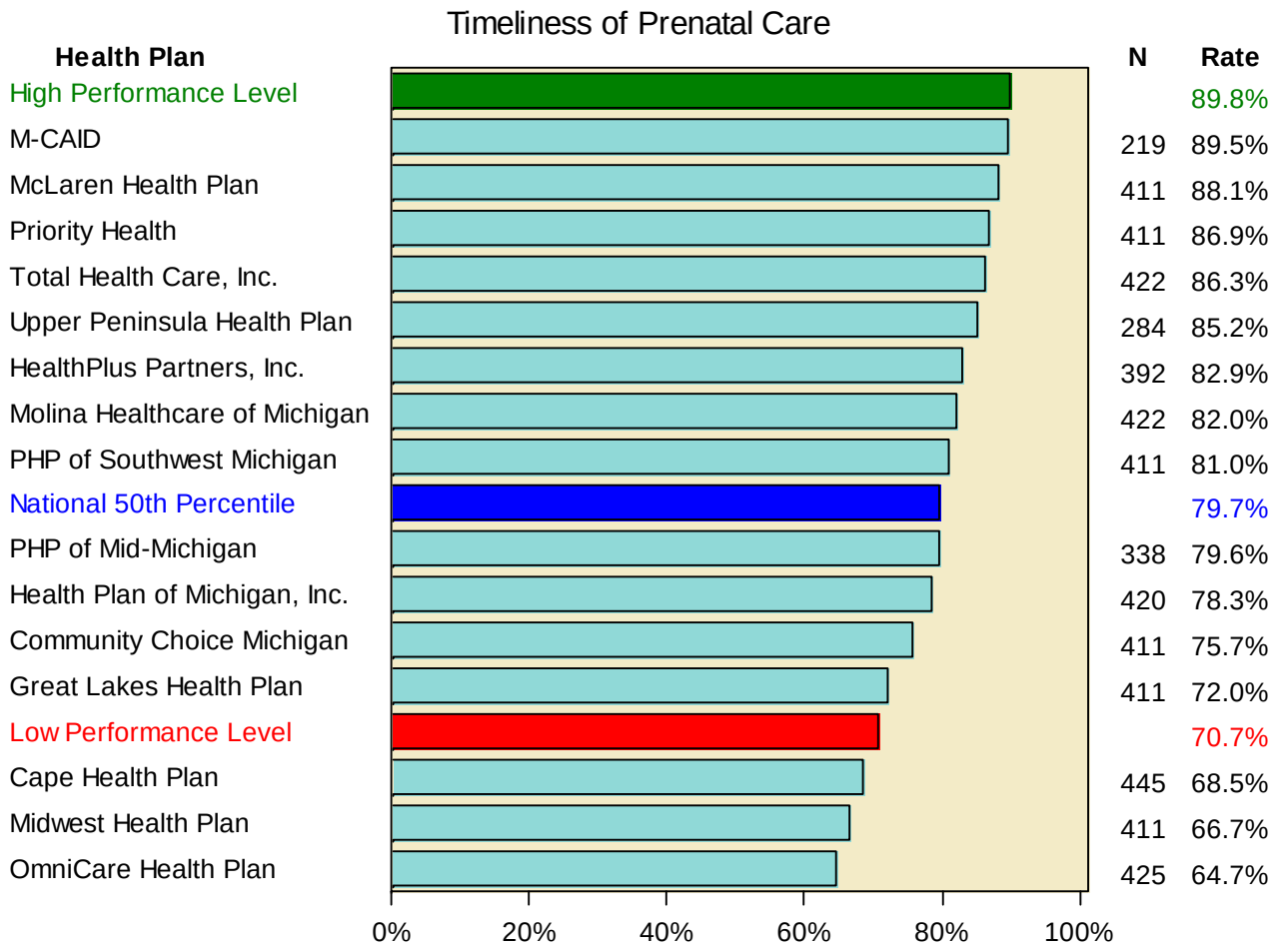
[4-13] Vital Records & Health Data Development Section, Michigan Department of Community Health 2004. Available at: http://www.mdch.state.mi.us/pha/osr/chi/births/bxweight/BxWeight.asp?DxId=0&CoCode=0&CoName=Michigan. Accessed on September 13, 2005.

[4-14] United Health Foundation. America's Health: State Health Rankings, 2004 Edition. Available at: http://www.unitedhealthfoundation.org/shr2004/components/infantmortality.html. Accessed on August 10, 2005.

[4-15] Michigan Department of Community Health, Michigan Resident Birth and Death Files, Vital Records & Health Data Development Section. Available at: http://www.mdch.state.mi.us/pha/osr/InDxMain/Tab2.asp. Accessed on September 9, 2005.

Health Plan Ranking: Prenatal and Postpartum Care—Timeliness of Prenatal Care

Figure 4-8—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Prenatal and Postpartum Care—Timeliness of Prenatal Care



2005 Michigan Medicaid Weighted Average = 77.5%
2004 Michigan Medicaid Weighted Average = 71.5%
2003 Michigan Medicaid Weighted Average = 66.9%

None of the health plans met the HPL of 89.8 percent, while three health plans had rates below the LPL of 70.7 percent. A total of eight health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

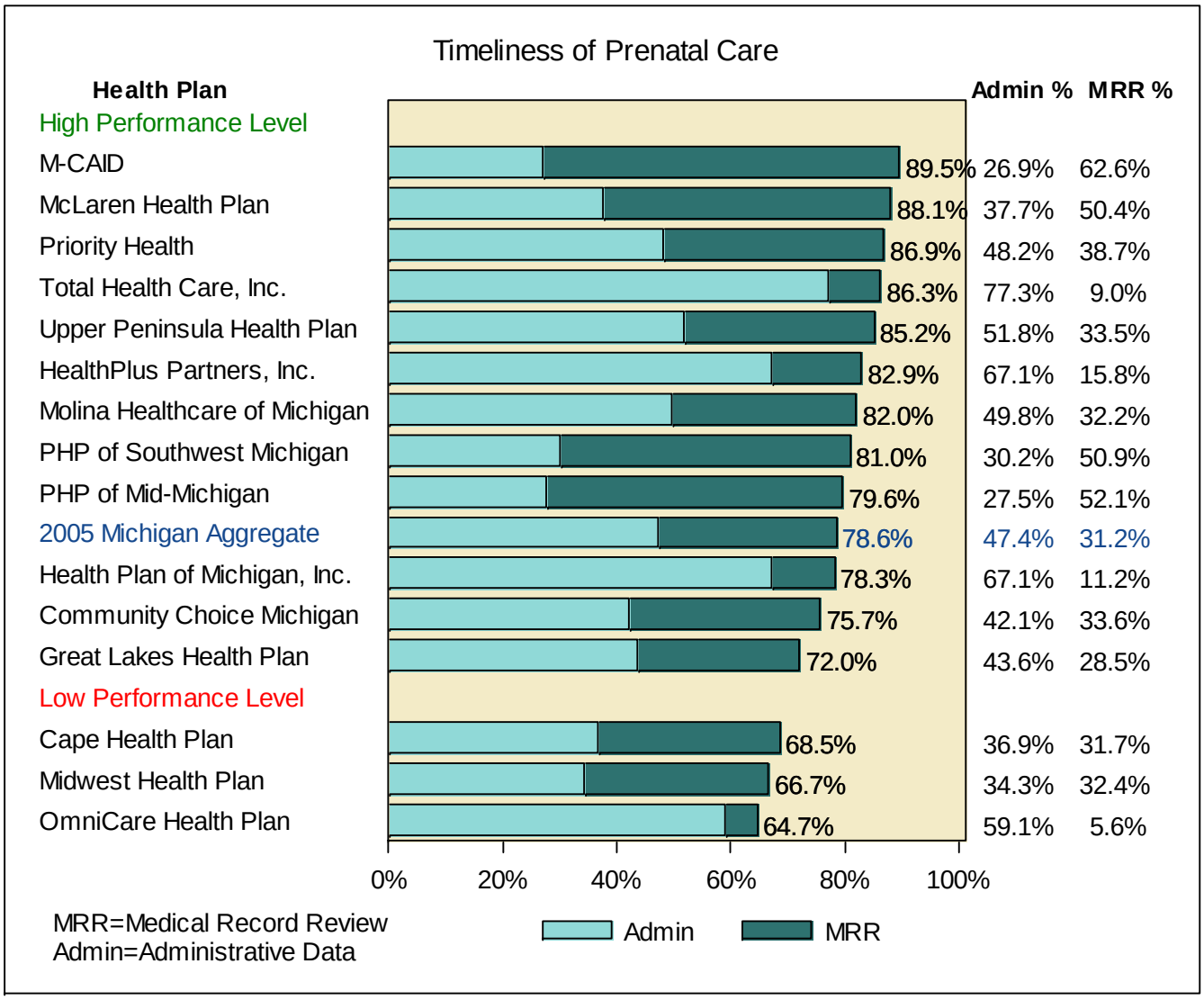
The 2005 Michigan Medicaid weighted average of 77.5 percent was 2.2 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 79.7 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004, up 6.0 percentage points. A gain of 10.6 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average.

In 2004, none of the health plans reported rates above the HPL, and two health plans had rates below the LPL. Overall, the range of reported rates shifted upward, indicating improvement from 2004 to 2005.

Data Collection Analysis: Prenatal and Postpartum Care—Timeliness of Prenatal Care

Figure 4-9—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Prenatal and Postpartum Care—Timeliness of Prenatal Care



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans elected to report this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 47.4 percent, and the medical record review rate was 31.2 percent.

Overall, 60.3 percent of the aggregate rate was derived from administrative data and 39.7 percent from medical record review. In 2004, 57.6 percent was derived from administrative data.

Eleven health plans derived more than half of their rates from administrative data, while only one health plan derived less than one-third of its rate from administrative data.

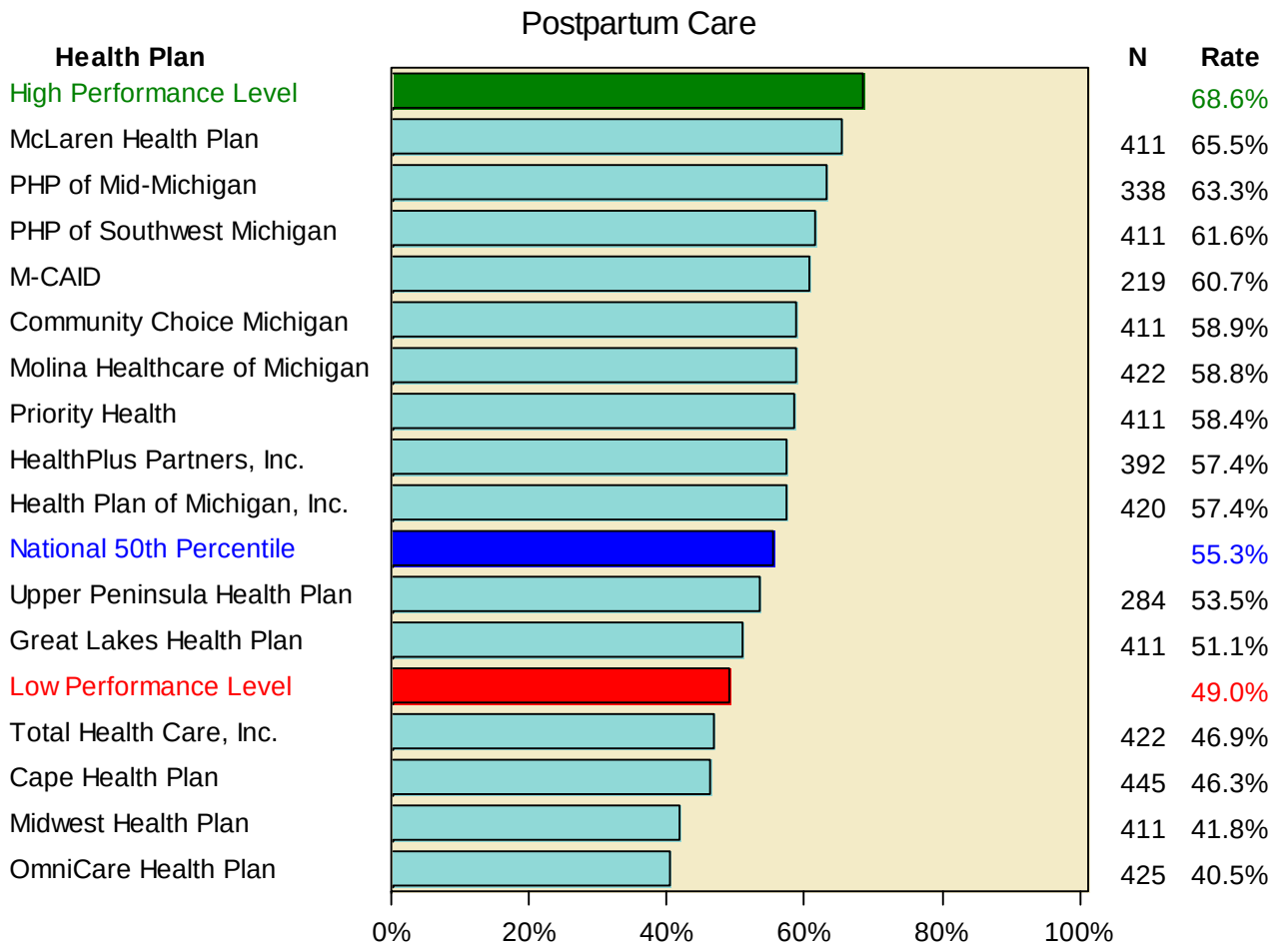
Historically, administrative data used to identify individual prenatal care visits has been negatively impacted by the use of global billing practices by most MHPs. Health plans that do not use global billing payment mechanisms to reimburse providers for prenatal care services typically have more complete administrative data, although this is not always linked to better performance. MHPs that establish a mechanism to collect individual prenatal care dates of service, either through global billing documentation requirements or the use of a prenatal care monitoring program, have been successful not only in decreasing their reliance on medical record review, but in actually improving performance.

HEDIS Specification: Prenatal and Postpartum Care—Postpartum Care

The *Postpartum Care* measure reports the percentage of women who delivered a live birth between November 6 of the year prior to the measurement year and November 5 of the measurement year, who were continuously enrolled at least 45 days prior to delivery through 56 days after delivery, and who received a postpartum visit on or between 21 days and 56 days after delivery.

Health Plan Ranking: Prenatal and Postpartum Care—Postpartum Care

Figure 4-10—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Prenatal and Postpartum Care—Postpartum Care



None of the health plans reported rates above the HPL of 68.6 percent, while four health plans had rates below the LPL of 49.0 percent. A total of nine health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

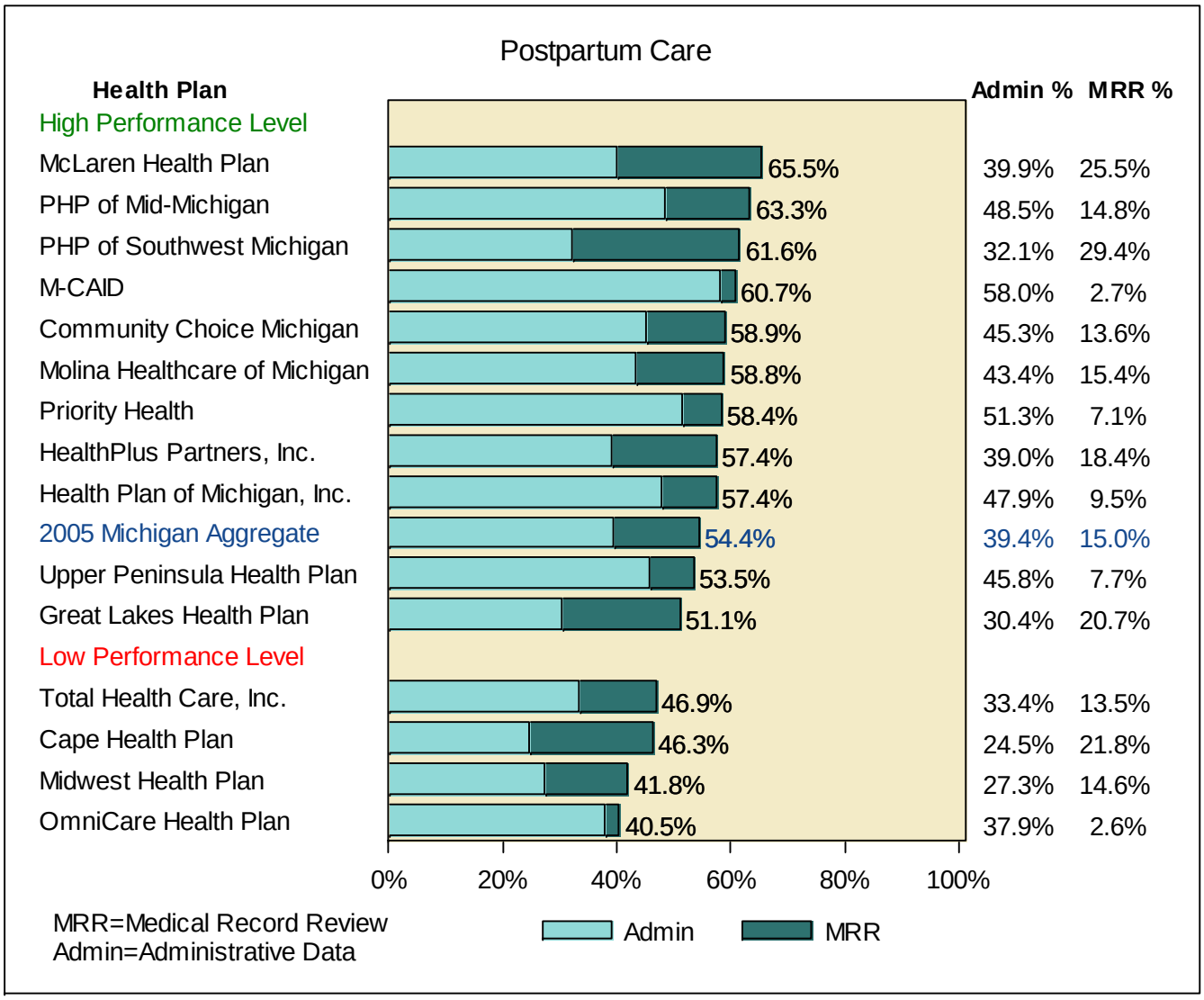
The 2005 Michigan Medicaid weighted average of 53.7 percent was 1.6 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 55.3 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004, up 8.8 percentage points. A gain of 8.8 percentage points was also observed when compared to 2003.

None of the health plans reported rates above the HPL in 2004, and seven health plans had rates below the LPL. Overall, the range of reported rates demonstrated improvement in 2005 compared to 2004.

Data Collection Analysis: Prenatal and Postpartum Care—Postpartum Care

Figure 4-11—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Prenatal and Postpartum Care—Postpartum Care



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans elected to report this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 39.4 percent, and the medical record review rate was 15.0 percent.

Overall, 72.4 percent of the aggregate rate was derived from administrative data and 27.6 percent from medical record review. In 2004, 71.4 percent was derived from administrative data.

In 2005, all health plans derived more than half of their rates from administrative data.

This key measure is also susceptible to global billing payment arrangements. Unless an MHP requires provider submission of postpartum care visit data, the health plan will need to rely more heavily on labor-intensive medical record review.

Women's Care Findings and Recommendations

In general, Michigan managed care program performance in the Women's Care dimension tends to be stagnant. Of the seven key measures in this dimension, only two showed statistically significant improvement in the weighted averages. For the others, the weighted average showed only a modest increase or a slight decrease compared with 2004. This is consistent with the national trend for only modest improvement in women's care related measures, in both the commercial and Medicaid product lines.

Cancer screening rates remained consistent over the past several years, with *Breast Cancer Screening* showing a slight decrease from the 2003 weighted average, and *Cervical Cancer Screening* demonstrating a slight gain. Cancer screening performance has been measured since the beginning of HEDIS performance measurement. These measures deserve a renewed focus. Medicaid cancer screening rates lag far behind their commercial counterparts, demonstrating that higher performance is indeed achievable. Strategies that have been successful in improving preventive care services in children can also be applied to adult screening measures. Tracking members that are in need of routine screenings and providing ongoing lists to providers can be very effective. A renewed concentration by both the MHPs and their providers to improve women's cancer screening rates is recommended.

Chlamydia Screening in Women rates have also remained stagnant in 2005. The Michigan weighted averages for all three age bands showed modest decreases compared with last year, in contrast to the consistent improvement observed from 2003 to 2004. Nationally, the Medicaid averages have shown consistent improvement with each measurement year. Notably, the Medicaid national average as well as the Michigan weighted average outperformed the commercial averages by as much as 15 percentage points. Efforts for improving the *Chlamydia Screening in Women* performance should begin with the providers. Provider education and buy-in are crucial to improve these measure results successfully. Because this measure is reported using administrative data only, MHPs are encouraged to produce denominator and numerator lists on a routine basis (such as quarterly), to help their providers identify members who still need to be screened. In addition, missed opportunities (e.g., when a member sees a provider, but the provider does not perform the chlamydia screening test) could be examined to identify barriers to improvement and target specific interventions.

Michigan Medicaid performance in the area of *Prenatal and Postpartum Care* is improving. Statistically significant improvements were observed in the Michigan weighted averages for both the *Timeliness of Prenatal Care* and the *Postpartum Care* key measures. Improvement was also observed in the Medicaid national averages for these measures. Opportunities for improvement, however, still exist. Both weighted averages are below the national HEDIS 2004 Medicaid 50th percentile. Most strikingly is the disparity in performance between Medicaid and commercial health plans. Nationally, commercial health plans outperform Medicaid health plans by as much as 13 percentage points for the *Timeliness of Prenatal Care* measure, and 25 percentage points for the *Postpartum Care* measure. Improvement efforts should target both providers and members. For providers, better tracking of prenatal care services and efficient tools for documentation can bring about improvement. For members, barriers to accessing prenatal care should be explored and addressed, which may include lack of knowledge, transportation issues, or cultural traditions. MHPs can assist providers with outreach to pregnant members to identify pregnancies as early as possible. The implementation of a prenatal care program to track prenatal and postpartum care services has also been shown to be successful.

5. Living With Illness

Introduction

Chronic illness afflicts 100 million Americans and accounts for 70 percent of all health care spending. The measures in this section (asthma, diabetes, high blood pressure, and smoking) focus on how health plans ensure those with ongoing, chronic conditions take care of themselves, control symptoms, avoid complications, and maintain daily activities. Comprehensive programs implemented by health plans can help reduce the prevalence, impact, and economic costs associated with these chronic illnesses.

The National Heart, Lung, and Blood Institute estimates that about 15 million people in the United States suffer from asthma; nearly 5 million are children. Asthma affects all races; however, African-Americans are more likely than Whites to be hospitalized for asthma and more likely to die from asthma. Recent analysis of the economic impact of asthma, commissioned by the American Lung Association to study asthma costs, cited annual estimated costs in 2004 of $16 billion.[5-1] Estimates for 2003 show that approximately 254,000 children and 694,000 adults had asthma in Michigan.[5-2] Prevalence of lifetime asthma for Michigan adults is slightly higher (13.6 percent) than that for the nation (11.9 percent).[5-3] In addition, lifetime prevalence rates in Michigan rise to as high as 18.1 percent for adults with family incomes less than $20,000.[5-4]

The American Diabetes Association estimates that 18.2 million people in the United States, or 6.3 percent of the population, suffer from diabetes, but only 13 million have been formally diagnosed with the disease. The prevalence of diabetes is higher in Hispanics, African-Americans, Asian-Americans, Native Americans and Pacific Islanders than in Whites. Diabetes prevalence, mortality, and complication rates associated with diabetes have also increased steadily in Michigan and in the nation over the last decade. Michigan average data (2001–2003) indicate that 590,000 adults and 8,700 people under the age of 18 have been diagnosed with diabetes. Diabetes costs Michigan residents $5.7 billion a year in lost productivity due to premature death, disability, and illness.[5-5]

Estimates reported by the American Heart Association indicate that nearly one in three adults in the United States has high blood pressure, but because there are no symptoms, nearly one-third of these people are undiagnosed. Uncontrolled high blood pressure can lead to stroke, heart attack, heart failure or kidney failure. The risk of developing high blood pressure increases with age. In fact, people with normal blood pressure at age 55 still have a 90 percent risk for developing high blood pressure in their lifetime.[5-6] In Michigan, approximately 3 out of 4 premature deaths are due to high blood pressure, high blood cholesterol, and cigarette smoking.[5-7]

[5-1] American Lung Association. Epidemiology & Statistics Unit. *Trends in Asthma Morbidity and Mortality.* 2005. Available at: http://www.lungusa.org/atf/cf/{7A8D42C2-FCCA-4604-8ADE-7F5D5E762256}/ASTHMA1.PDF Accessed on September 12, 2005.
[5-2] Ibid.
[5-3] Ibid
[5-4] Michigan Department of Community Health. Epidemiology of Asthma in Michigan, 2004 Surveillance Report. Available at: http://www.michigan.gov/documents/MIAsthmaSurveillance_2004_96083_7.pdf. Accessed on August 19, 2005.
[5-5] Michigan Department of Community Health. Diabetes in Michigan, 2004. Available at: http://www.michigan.gov/documents/mifact_6829_7.pdf. Accessed on August 18, 2005.

Cigarette smoking kills about half of all continuing smokers, and is the most preventable cause of premature death in the United States. According to the American Cancer Society, about 430,000 deaths from smoking are expected in any given year.[5-8] Yet, about 25 percent of all American adults smoke, and the prevalence of smoking among adolescents has risen dramatically over the past decade. Smoking is the major cause of many cancers, as well as other serious diseases, including heart disease, bronchitis, emphysema, and strokes. Most smokers make several attempts to quit, and, according to the U.S. surgeon general, 46 percent of smokers try to quit each year.[5-9]

Assistance with smoking cessation is extremely cost-effective compared with the estimated $50 billion of annual medical care costs related to smoking or smoking-related diseases. The U.S. Public Health Service issued a clinical practice guideline for treating tobacco use and dependence (June 2000), estimating that it would cost $6.3 billion each year to provide 75 percent of smokers over age 18 with a counseling and/or medication intervention for smoking cessation. This would result in an estimated 1.7 million new quitters at an average cost of $3,779 per quitter.[5-10] The Michigan Cancer Consortium estimates that if overall adult smoking prevalence in Michigan were reduced by 42 percent and adult per capita consumption in the state were reduced by 25 percent, there would be 1,100 fewer lung cancer deaths each year.[5-11]

The Living With Illness dimension encompasses the following MDCH key measures:

- **Comprehensive Diabetes Care**
  - *Comprehensive Diabetes Care—HbA1c Testing*
  - *Comprehensive Diabetes Care—Poor HbA1c Control*
  - *Comprehensive Diabetes Care—Eye Exam*
  - *Comprehensive Diabetes Care—LDL-C Screening*
  - *Comprehensive Diabetes Care—LDL-C Level<130*
  - *Comprehensive Diabetes Care—LDL-C Level<100*
  - *Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy*
- **Use of Appropriate Medications for People With Asthma**
  - *Use of Appropriate Medications for People With Asthma—Ages 5 to 9 Years*
  - *Use of Appropriate Medications for People With Asthma—Ages 10 to 17 Years*
  - *Use of Appropriate Medications for People With Asthma—Ages 18 to 56 Years*
  - *Use of Appropriate Medications for People With Asthma—Combined Rate*
- **Controlling High Blood Pressure**
- **Medical Assistance With Smoking Cessation—Advising Smokers to Quit**

[5-6] National Institutes of Health Web site. Available at: http://hin.nhlbi.nih.gov/nhbpep_slds/jnc/slides/part1/img006.gif. Accessed on August 18, 2005.

[5-7] Michigan Department of Community Health. 2004 CVD Fact Sheet. Available at: http://www.michigan.gov/documents/cvdfact03_78179_7.pdf. Accessed on August 18, 2005.

[5-8] American Cancer Society. Health Information Seekers—Cigarette Smoking Tobacco-related Diseases Kill Half of All Smokers; 2003. Available at: http://www.cancer.org/docroot/PED/content/PED_10_2X_Cigarette_Smoking_and_Cancer.asp?sitearea=PED. Accessed on August 18, 2005.

[5-9] U.S. Public Health Service. Treating Tobacco Use and Dependence. Fact Sheet; June 2000. Available at: http://www.surgeongeneral.gov/tobacco/smokfact.htm. Accessed on August 18, 2005.

[5-10] U.S. Public Health Service. Treating Tobacco Use and Dependence—A Systems Approach. A Guide for Health Care Administrators, Insurers, Managed Care Organizations, and Purchasers; November 2000. Available at: http://www.surgeongeneral.gov/tobacco/systems.htm. Accessed on August 18, 2005.

[5-11] Michigan Department of Community Health. Facts About Lung Cancer, October 2003. Available at: http://www.michigancancer.org/PDFS/MDCHFactSheets/LungCAFactSheet-Oct03.pdf. Accessed on August 18, 2005.

The following pages provide detailed analysis of Michigan MHP performance and ranking, as well as data collection methodology for these measures.

Comprehensive Diabetes Care

Approximately 13 million Americans were diagnosed with diabetes in 2002, the sixth leading cause of death in the United States.[5-12] In Michigan, 590,000 people were newly diagnosed with diabetes in 2003.[5-13] Control of diabetes significantly reduces the rate of complications and improves quality of life for diabetics. The World Health Organization (WHO) estimates that the total health care costs of a person with diabetes in the United States are three times those for people without the condition. The estimated direct and indirect costs of diabetes in Michigan were nearly $6 billion in 2002.[5-14]

Diabetes is the leading cause of blindness and kidney failure in Michigan and a major factor in hypertension, cardiovascular disease, and lower-extremity amputations.[5-15] Control of diabetes significantly reduces the rate of complications and improves quality of life for diabetics. It is estimated that, for every 1 percent reduction in blood glucose levels, the risk of developing diabetic retinal (eye) disease or kidney end stage renal disease, and for requiring lower-extremity amputation, drops by 40 percent.[5-16] Therefore, a comprehensive assessment of diabetes care necessitates examination of multiple factors. This 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 hypertension and foot care). The DQIP is a national quality of care project sponsored by the Centers for Medicare & Medicaid Services (CMS), the American Diabetic Association (ADA), FACCT, and NCQA. When viewed simultaneously, the components build a comprehensive picture that permits a better understanding of the quality of diabetes care.

The *Comprehensive Diabetes Care* measure is reported using seven separate rates:

1. *Comprehensive Diabetes Care—HbA1c Testing*
2. *Comprehensive Diabetes Care—Poor HbA1c Control*
3. *Comprehensive Diabetes Care—Eye Exam*
4. *Comprehensive Diabetes Care—LDL-C Screening*
5. *Comprehensive Diabetes Care—LDL-C Level <100*
6. *Comprehensive Diabetes Care—LDL-C Level <130*
7. *Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy*

[5-12] National Institutes of Health. National Diabetes Statistics, 2004. Available at: http://diabetes.niddk.nih.gov/dm/pubs/statistics/index.htm#11. Accessed on September 14, 2005.

[5-13] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adult and Community Health, data from the Behavioral Risk Factor Surveillance System. Available at: http://www.cdc.gov/diabetes/statistics/prev/state/tNumberTotal.htm. Accessed on September 14, 2005.

[5-14] Ibid.

[5-15] Michigan Department of Community Health. Michigan Diabetes Strategic Plan, October 2003. Available at: http://www.michigan.gov/documents/DM_StrategicPlan_82795_7.pdf. Accessed on September 14, 2005.

[5-16] National Committee for Quality Assurance. *The State of Health Care Quality 2003.* (Standard Version). Washington, DC: National Committee for Quality Assurance; 2003: p. 34.

The following pages show in detail the performance profile, health plan rankings, and analysis of data collection methodology used by the Michigan MHPs for each of these measures.

Comprehensive Diabetes Care—HbA1c Testing

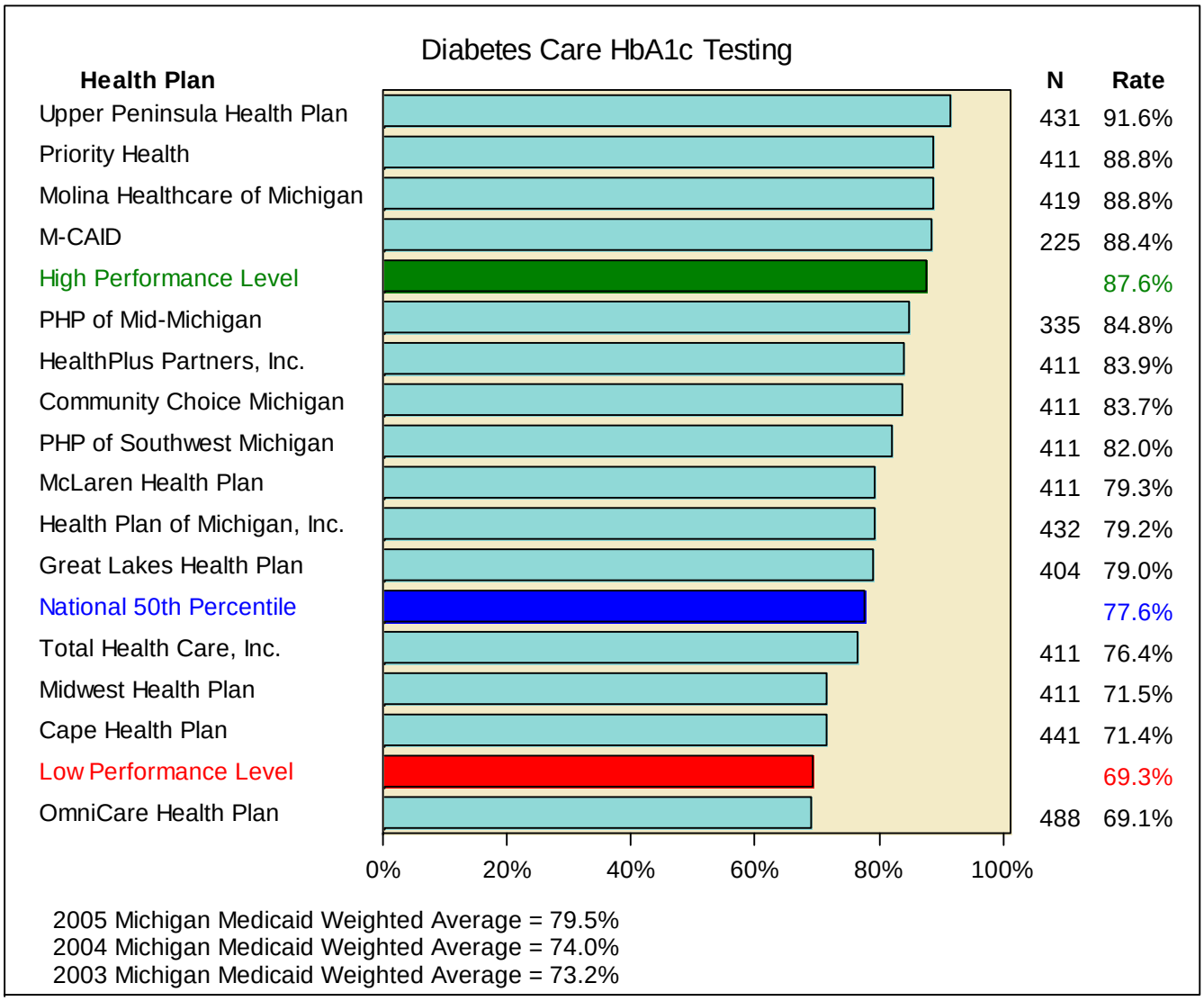
The HbA1c test (hemoglobin A1c test or glycosylated hemoglobin test) is a laboratory test that reveals average blood glucose over a period of two to three months. Specifically, it measures the number of glucose molecules attached to hemoglobin in red blood cells. The test takes advantage of the lifecycle of 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 the "big picture" and complements 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 reports the percentage of members with diabetes (Type 1 and Type 2) aged 18 through 75 years, who were continuously enrolled during the measurement year and who had one or more HbA1c test(s) conducted during the measurement year identified through either administrative data or medical record review.

Health Plan Ranking: Comprehensive Diabetes Care—HbA1c Testing

Figure 5-1—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—HbA1c Testing



Four health plans reported rates above the HPL of 87.6 percent, while one health plan had a rate below the LPL of 69.3 percent. A total of 11 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

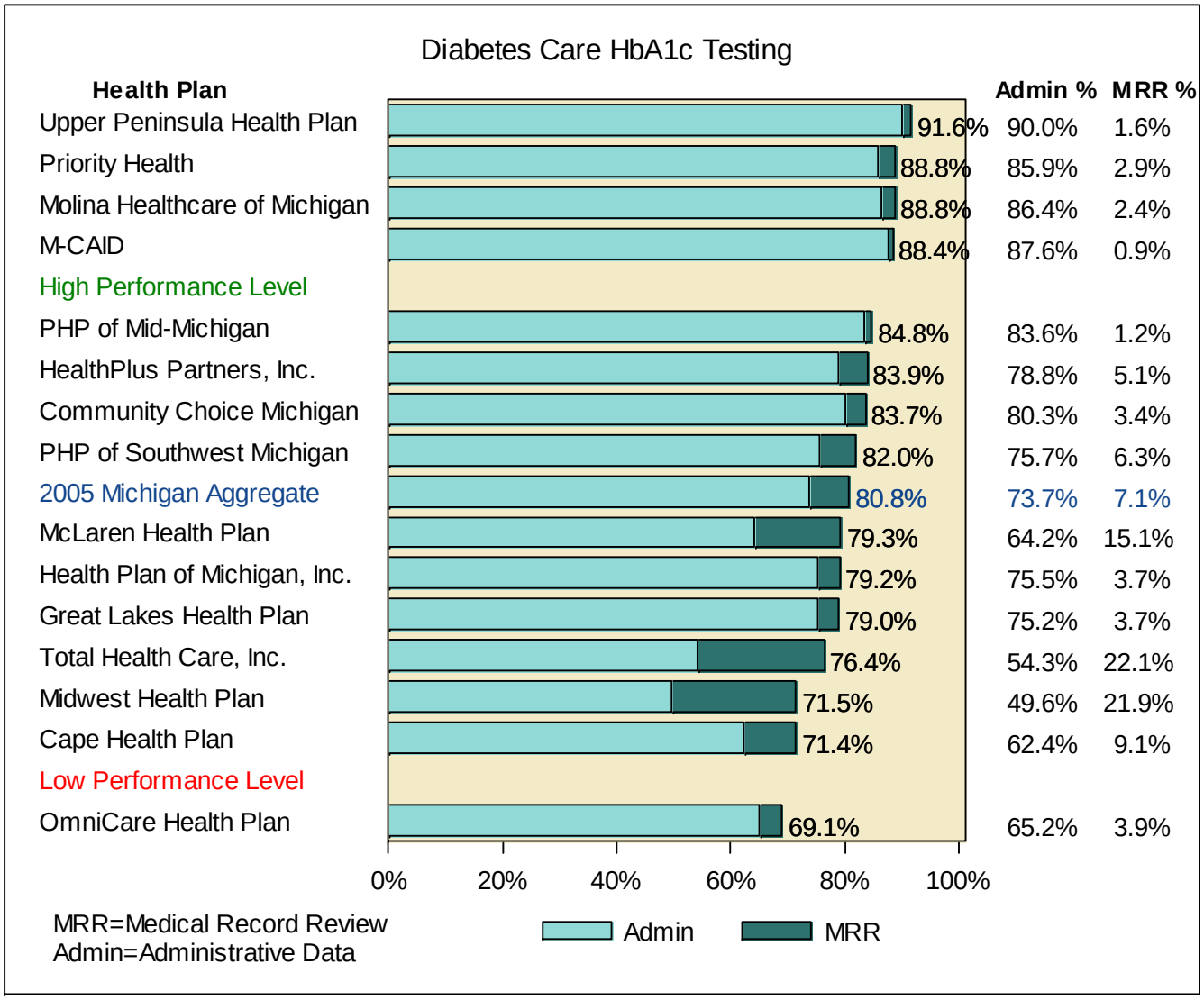
The 2005 Michigan Medicaid weighted average of 79.5 percent was 1.9 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 77.6 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004 of 5.5 percentage points. An increase of 6.3 percentage points was observed over the 2003 Michigan Medicaid weighted average.

In 2004, two health plans reached the HPL and two health plans had rates below the LPL. Overall, the range of reported rates showed improvement from 2004 to 2005.

Data Collection Analysis: Comprehensive Diabetes Care—HbA1c Testing

Figure 5-2—Michigan Medicaid HEDIS 2005 Data Collection Analysis: *Comprehensive Diabetes Care—HbA1c Testing*



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans elected to use the hybrid methodology to calculate this measure. The 2005 Michigan aggregate administrative rate was 73.7 percent.

In 2005, 91.2 percent of the aggregate rate was derived from administrative data and 8.8 percent from medical record review. In 2004, 89.1 percent of the aggregate rate was derived from administrative data.

The use of medical record review increased the 2005 Michigan aggregate rate by 7.1 percentage points. Three health plans increased their overall rates by 15 percentage points or more from medical record review.

As shown by Figure 5-2, administrative data completeness (i.e., claims and encounter data submission) was not an issue with the majority of health plans for this measure. This implies that providers and/or laboratories routinely submitted claims or encounter data for diabetic members who received HbA1c testing.

Comprehensive Diabetes Care—Poor HbA1c Control

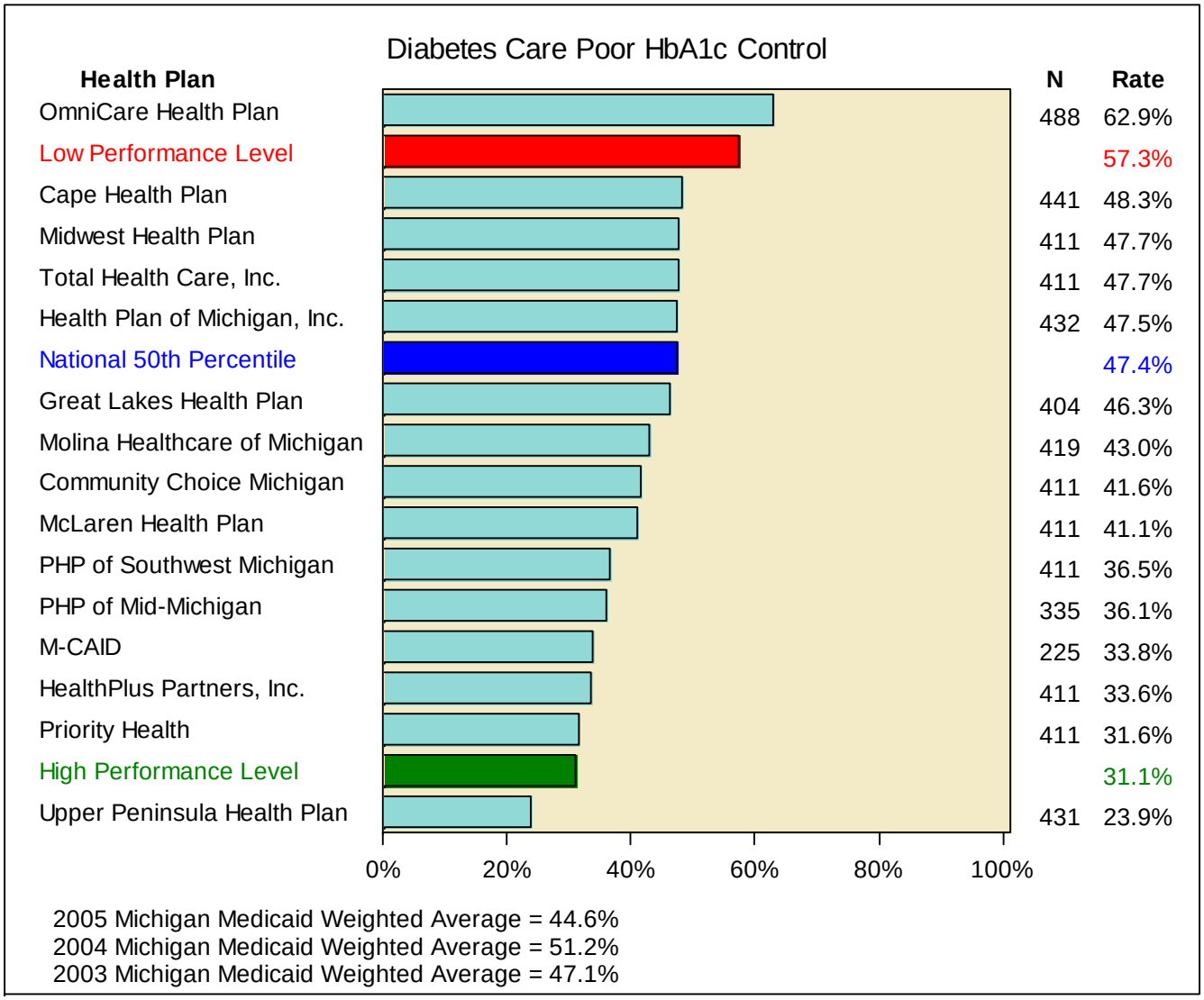
HbA1c control improves quality of life, increases work productivity, and decreases health care utilization. Decreasing the HbA1c level lowers the risk of diabetes-related death. Controlling blood glucose levels in people with diabetes significantly reduces the risk for blindness, end-stage renal disease, and lower extremity amputation.

HEDIS Specification: Comprehensive Diabetes Care—Poor HbA1c Control

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

Health Plan Ranking: Comprehensive Diabetes Care—Poor HbA1c Control

Figure 5-3—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—Poor HbA1c Control



For this Key Measure, a *lower* rate indicates *better* performance, since low rates of *Poor HbA1c Control* indicate better care.

One health plan had a rate above the HPL of 31.1 percent, while one had a rate below the LPL of 57.3 percent. A total of 10 health plans reported rates lower than the national HEDIS 2004 Medicaid 50th percentile, signifying better performance.

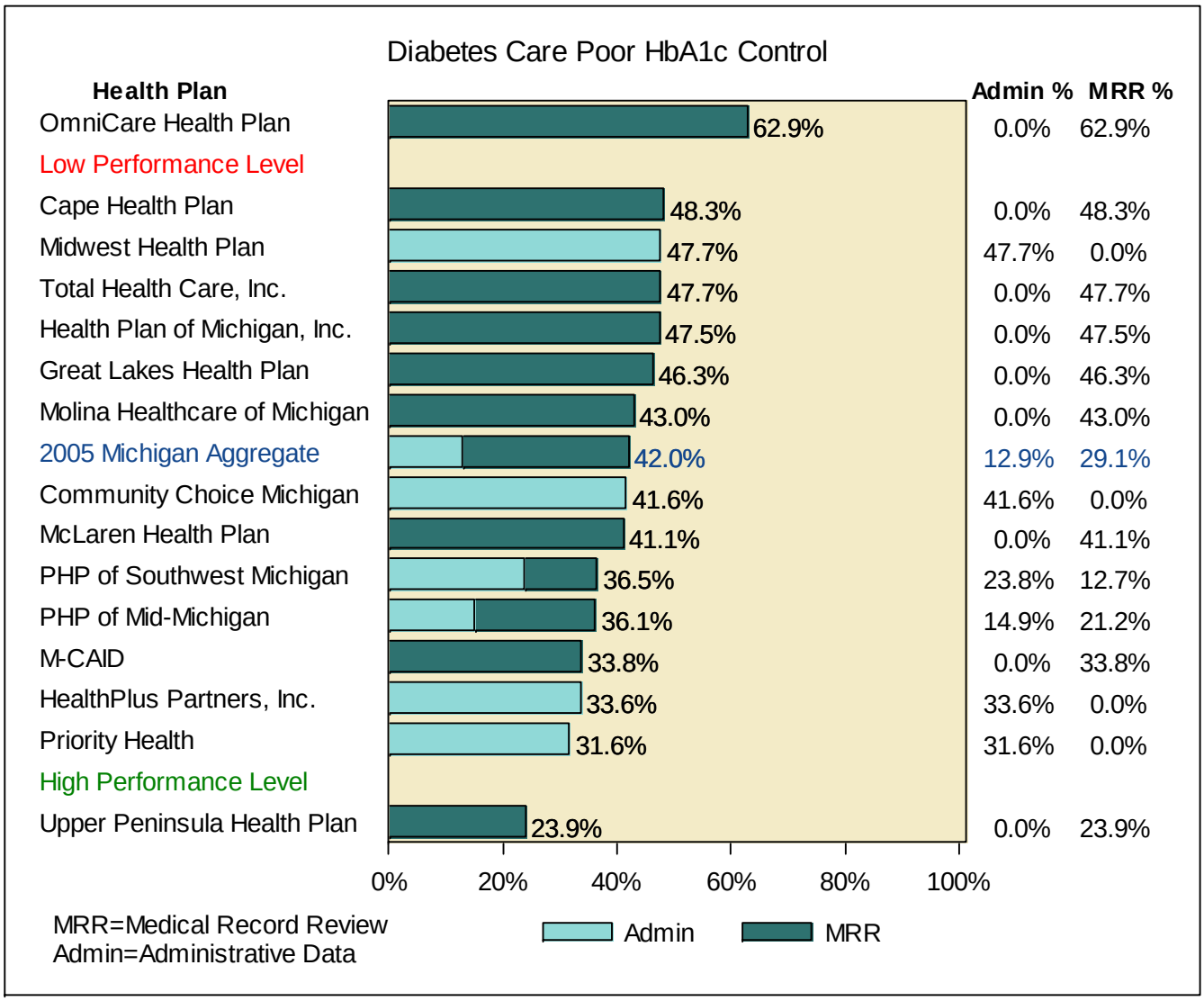
The 2005 Michigan Medicaid weighted average of 44.6 percent was 2.8 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 47.4 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant decline when compared to 2004 of 6.6 percentage points, demonstrating positive gains. A decrease of 2.5 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average.

One health plan reported rates above the HPL, and three health plans had rates below the LPL in 2004. Overall, the range of reported rates improved from 2004 to 2005.

Data Collection Analysis: Comprehensive Diabetes Care—Poor HbA1c Control

Figure 5-4—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Comprehensive Diabetes Care—Poor HbA1c Control



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

For this Key Measure, a *lower* rate indicates *better* performance, since low rates of *Poor HbA1c Control* indicate better care.

Figure 5-4 presents the breakout of rates that were derived from administrative data and medical record review for *Poor HbA1c Control*. For this measure, a *lower* rate indicates better performance.

All health plans with reported rates elected to use the hybrid methodology to calculate this measure. The 2005 Michigan aggregate administrative rate for this measure was 12.9 percent and 29.1 percent for the medical record review.

Results indicate that 30.7 percent of the aggregate rate was derived from administrative data, while 69.3 percent was derived from medical record review. In 2004, 37.8 percent of the aggregate rate was derived from administrative data.

Although administrative data submission has shown some improvement for this measure, the rates were still dependent on medical record review. In conjunction with the HbA1c testing measure, the results imply that administrative data was typically submitted for the actual test, but the results of the test (i.e., the HbA1c level) was not be captured administratively.

Comprehensive Diabetes Care—Eye Exam

Diabetic retinopathy causes up to 24,000 new cases of blindness every year. Blindness in diabetics under the age of 65 costs the federal government more than $14,000 annually for each affected person, while screening for diabetic retinopathy has been estimated to cost about $31 per patient.[5-17]

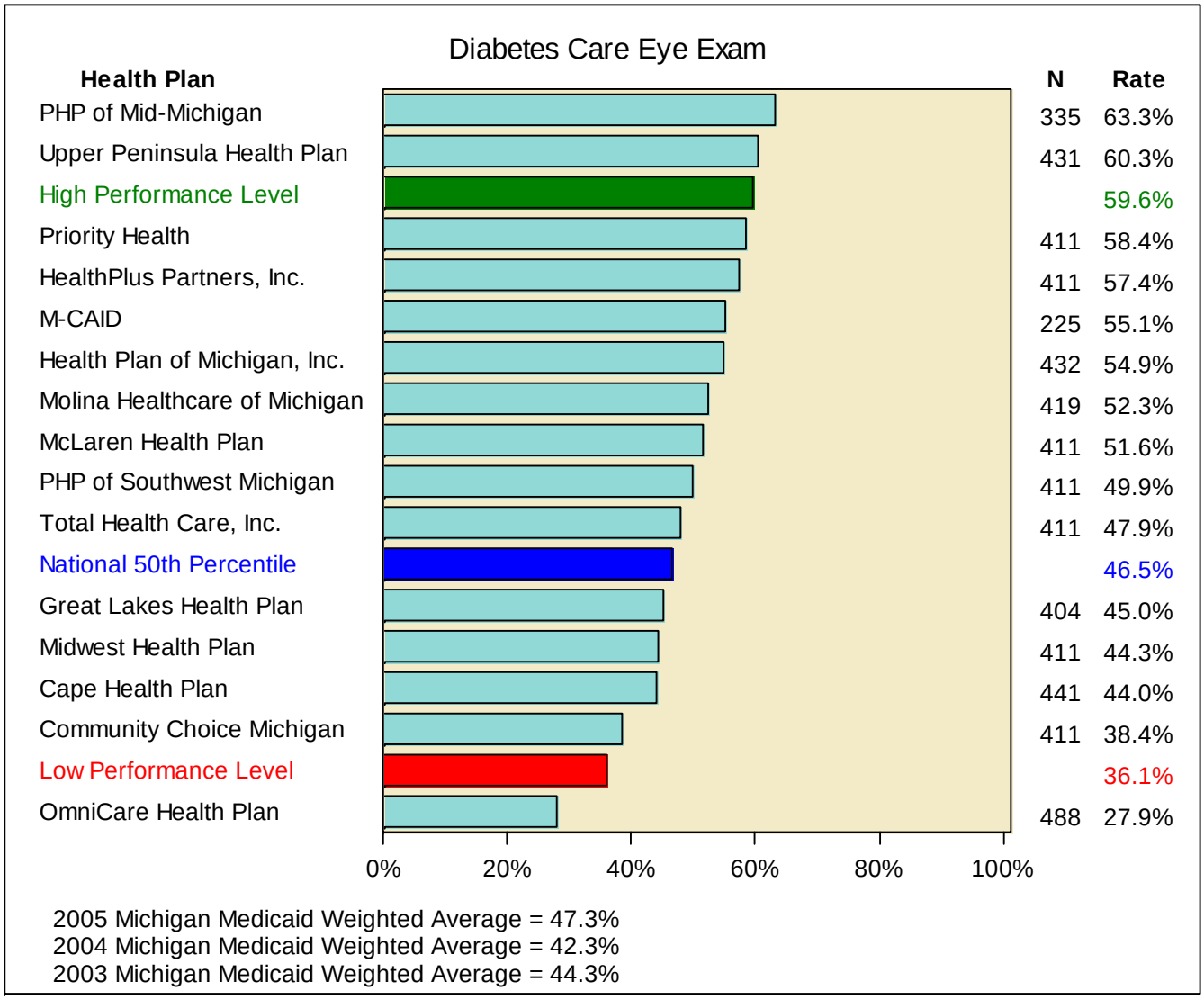
HEDIS Specification: Comprehensive Diabetes Care—Eye Exam

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

[5-17] National Committee for Quality Assurance. *The State of Managed Care Quality. 2001*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:47-8.

Health Plan Ranking: Comprehensive Diabetes Care—Eye Exam

Figure 5-5—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—Eye Exam



Two health plans reported rates above the HPL of 59.6 percent, while one health plan had a rate below the LPL of 36.1 percent. A total of 10 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

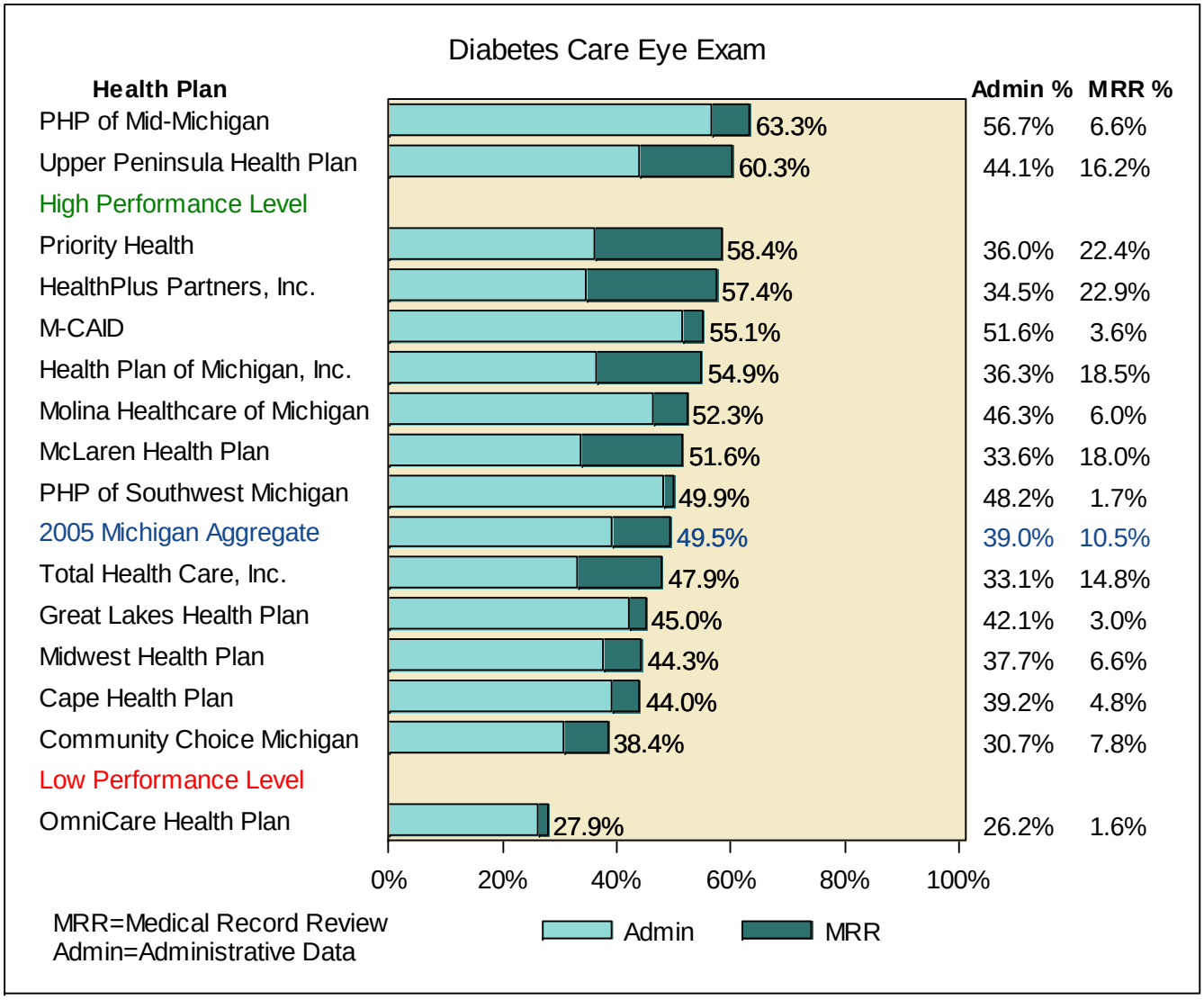
The 2005 Michigan Medicaid weighted average of 47.3 percent was 0.8 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 46.5 percent.

The 2005 Michigan Medicaid weighted average increased by 5.0 percentage points over 2004, and 3.0 percentage points above the 2003 Michigan Medicaid weighted average.

None of the health plans reached the HPL in 2004, and six health plans had rates below the LPL. Overall, improvement was observed from 2004 to 2005 with two health plans reaching the HPL and fewer health plans performing in the LPL.

Data Collection Analysis: Comprehensive Diabetes Care—Eye Exam

Figure 5-6—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Comprehensive Diabetes Care—Eye Exam



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans elected to use the hybrid methodology to calculate this measure. The 2005 Michigan aggregate administrative rate was 39.0 percent.

In 2005, 78.8 percent of the aggregate rate was derived from administrative data and 11.2 percent from medical record review. In 2004, 76.0 percent of the aggregate rate was derived from administrative data.

The use of medical record review increased the 2005 Michigan aggregate rate by 10.5 percentage points. Two health plans showed substantial improvement in their overall rates from medical record review, increasing by more than 20 percentage points.

The considerable increase in the use of administrative data to report the eye exams numerator is encouraging. Success in identifying numerator events using administrative data is highly dependent upon the contractual arrangement with the provider (ensuring that the provider contract requires the submission of complete and accurate claims data) and the monitoring and oversight functions by the health plan of its eye care providers.

Comprehensive Diabetes Care—LDL-C Screening

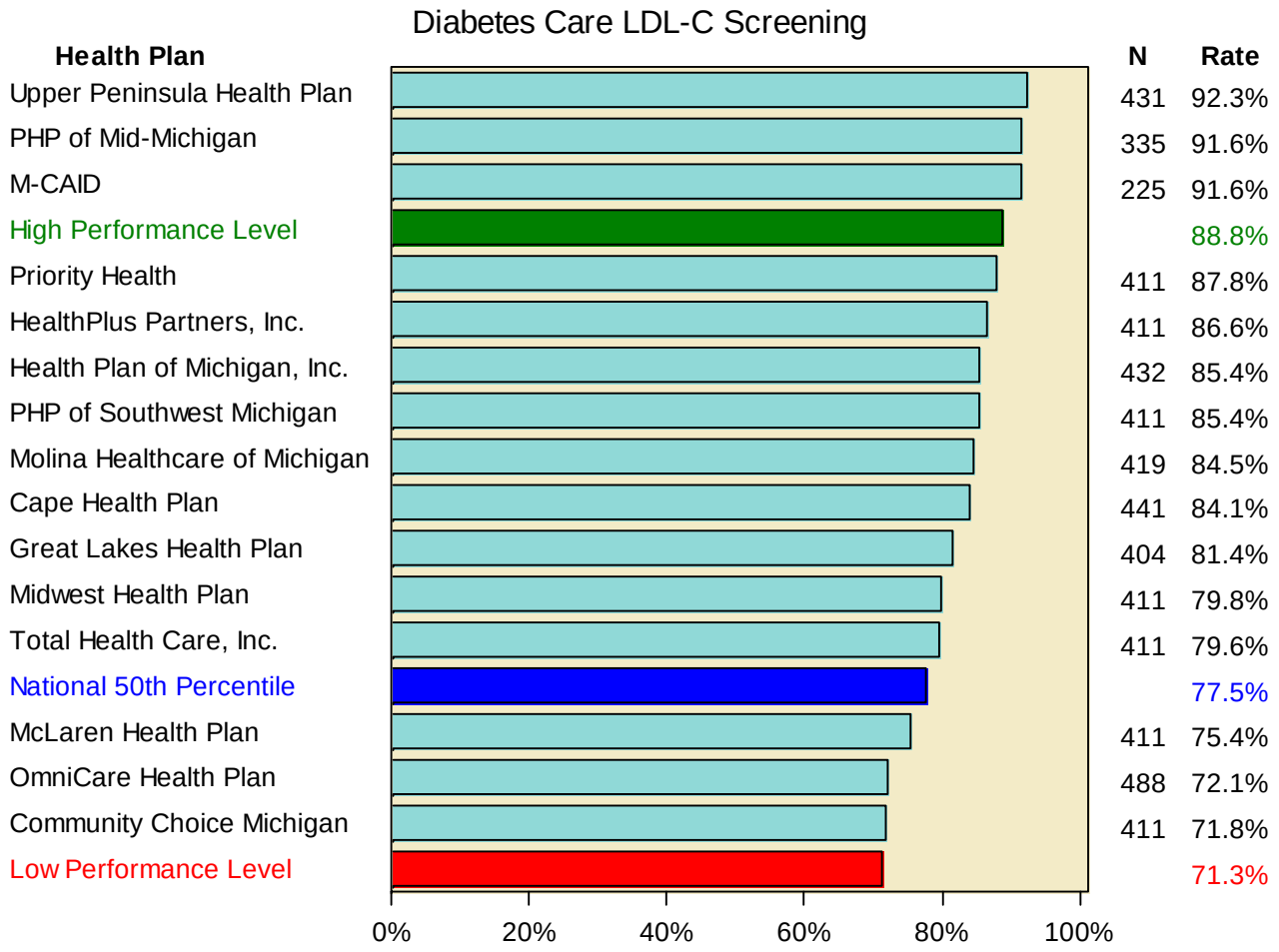
LDL is a type of lipoprotein that carries cholesterol in the blood. LDL is considered to be undesirable because it deposits excess cholesterol in walls of blood vessels and contributes to "hardening of the arteries" and heart disease. Hence, LDL cholesterol is often termed "bad" cholesterol. The test for LDL measures the amount of LDL cholesterol in blood.

HEDIS Specification: Comprehensive Diabetes Care—LDL-C Screening

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

Health Plan Ranking: Comprehensive Diabetes Care—LDL-C Screening

Figure 5-7—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—LDL-C Screening



Three health plans reported rates above the HPL of 88.8 percent, while none of the health plans had rates below the LPL of 71.3 percent. A total of 12 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

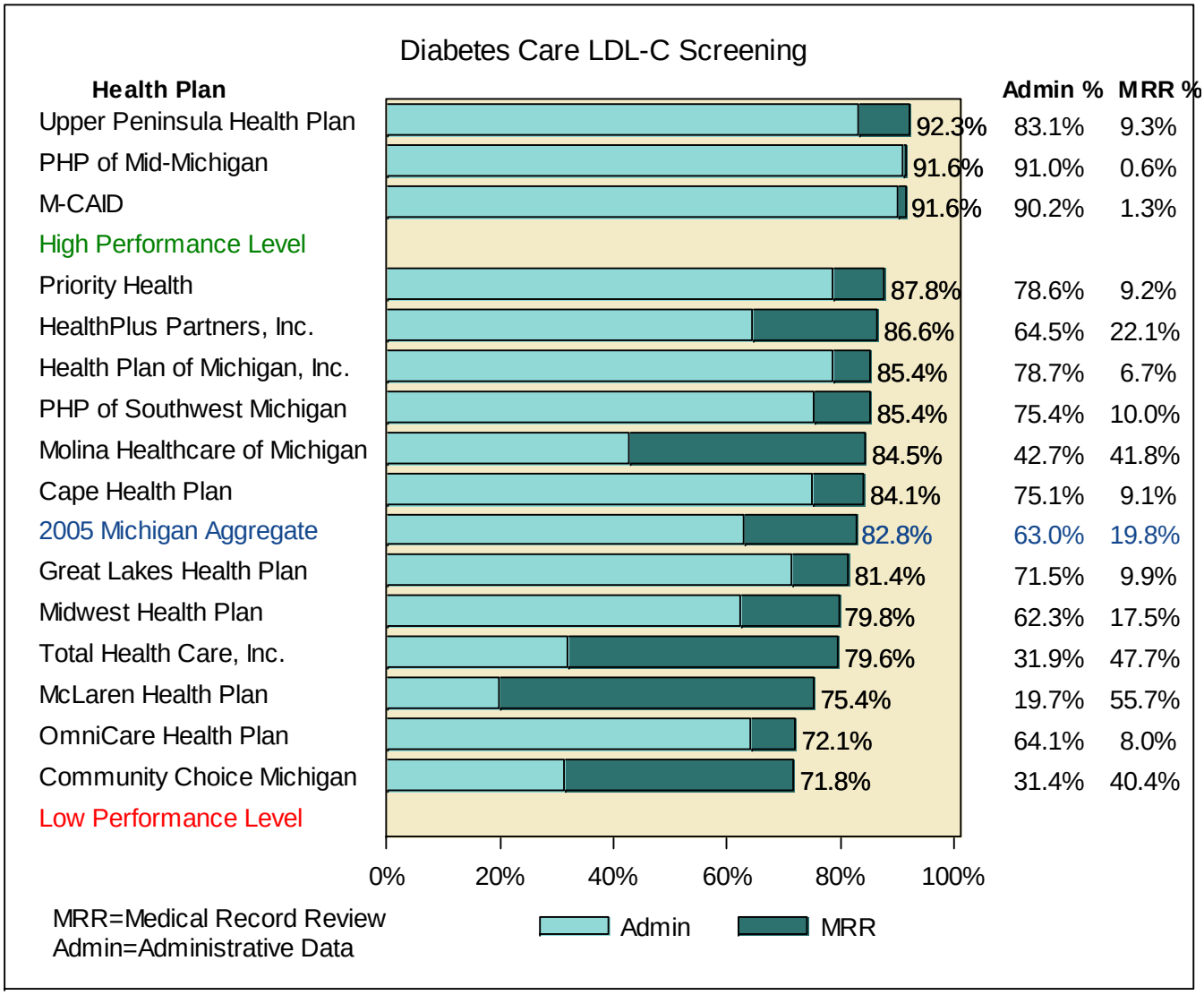
The 2005 Michigan Medicaid weighted average of 81.6 percent was 4.1 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 77.5 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004, up 7.0 percentage points. A gain of 12.4 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average.

In 2004, four health plans reached the HPL and three health plans had rates below the LPL. Overall, the range of reported rates exhibited improvement from 2004 to 2005.

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

Figure 5-8—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Comprehensive Diabetes Care—LDL-C Screening



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans elected to report this measure using the hybrid methodology. The 2005 Michigan aggregate administrative rate was 63.0 percent, and the medical record review rate was 19.8 percent.

Overall, 76.1 percent of the aggregate rate was derived from administrative data and 23.9 percent from medical record review. In 2004, approximately 70 percent was derived from administrative data.

Twelve of the 15 health plans derived more than half of their rates from administrative data, while one health plan derived less than 30 percent of its rate from administrative data.

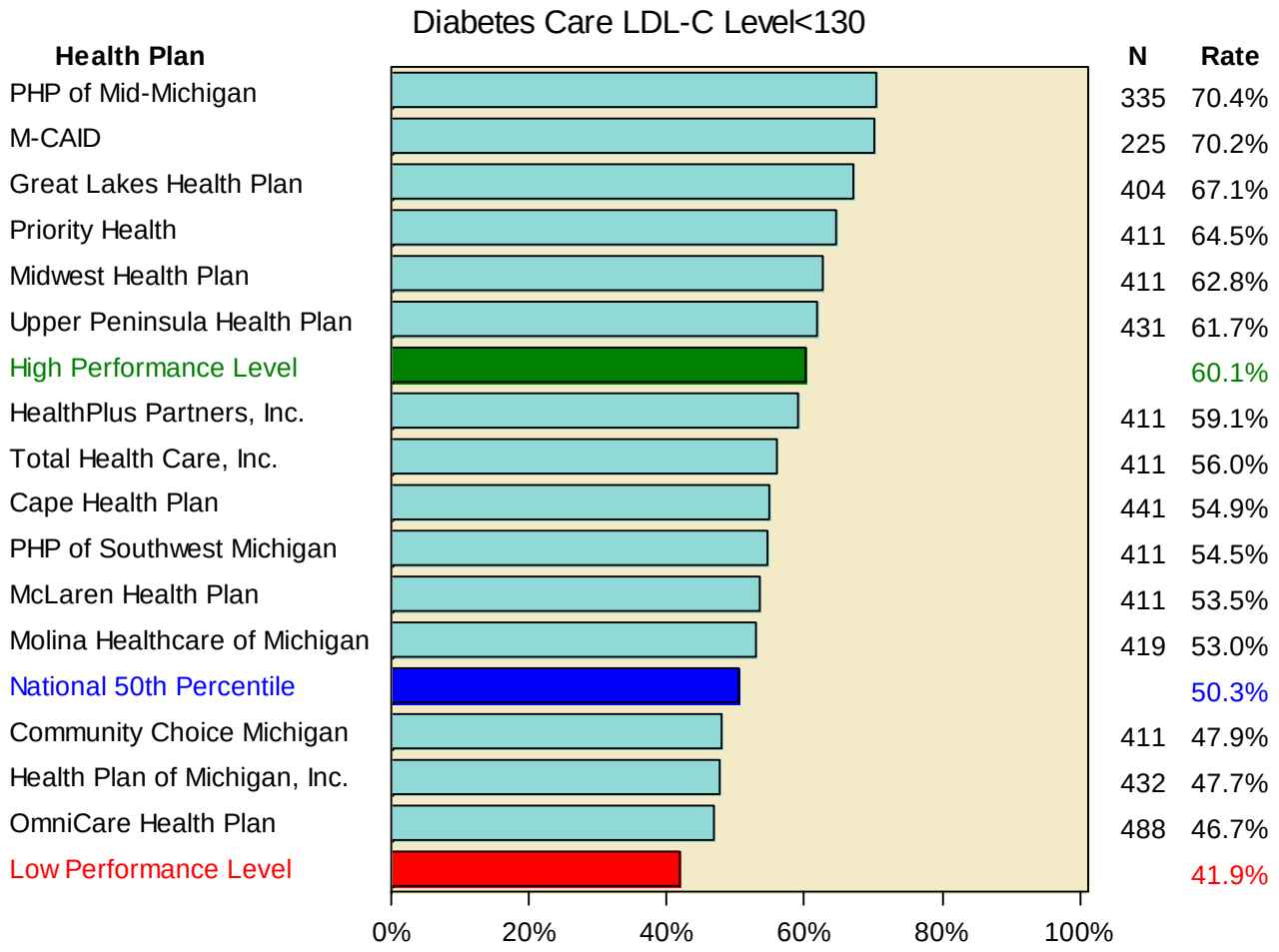
Although the administrative rate for this measure has improved, the majority of health plans still rely heavily upon medical record review to calculate the rate. This implies that the health plans do not receive complete billing data from providers and/or laboratories for this measure, yet the health plans do receive data for HbA1c testing (see Figure 5-2). Lack of specific billing data may be due to contractual and/or billing policies among the health plans and their contracted providers (e.g., laboratories may not be required to submit an encounter for LDL-C screening, but may be contractually required to submit all HbA1c tests). The health plans should further explore the possible reasons for substantially lower administrative data submission for LDL-C screening compared to HbA1c testing.

HEDIS Specification: Comprehensive Diabetes Care—LDL-C Level<130

The rate for *Comprehensive Diabetes Care—LDL-C Level <130* calculates the percentage of members with diabetes (Type 1 and Type 2) aged 18 through 75 years who were continuously enrolled during the measurement year and whose most recent LDL-C test (performed during the measurement year or the year prior to the measurement year) indicated an LDL-C level less than 130 mg/dL, as documented through automated laboratory data and/or medical record review.

Health Plan Ranking: Comprehensive Diabetes Care—LDL-C Level<130

Figure 5-9—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—LDL-C Level<130



2005 Michigan Medicaid Weighted Average = 56.6%
2004 Michigan Medicaid Weighted Average = 48.6%
2003 Michigan Medicaid Weighted Average = 43.8%

Six health plans reported rates above the HPL of 60.1 percent, while none of the health plans had rates below the LPL of 41.9 percent. A total of 12 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

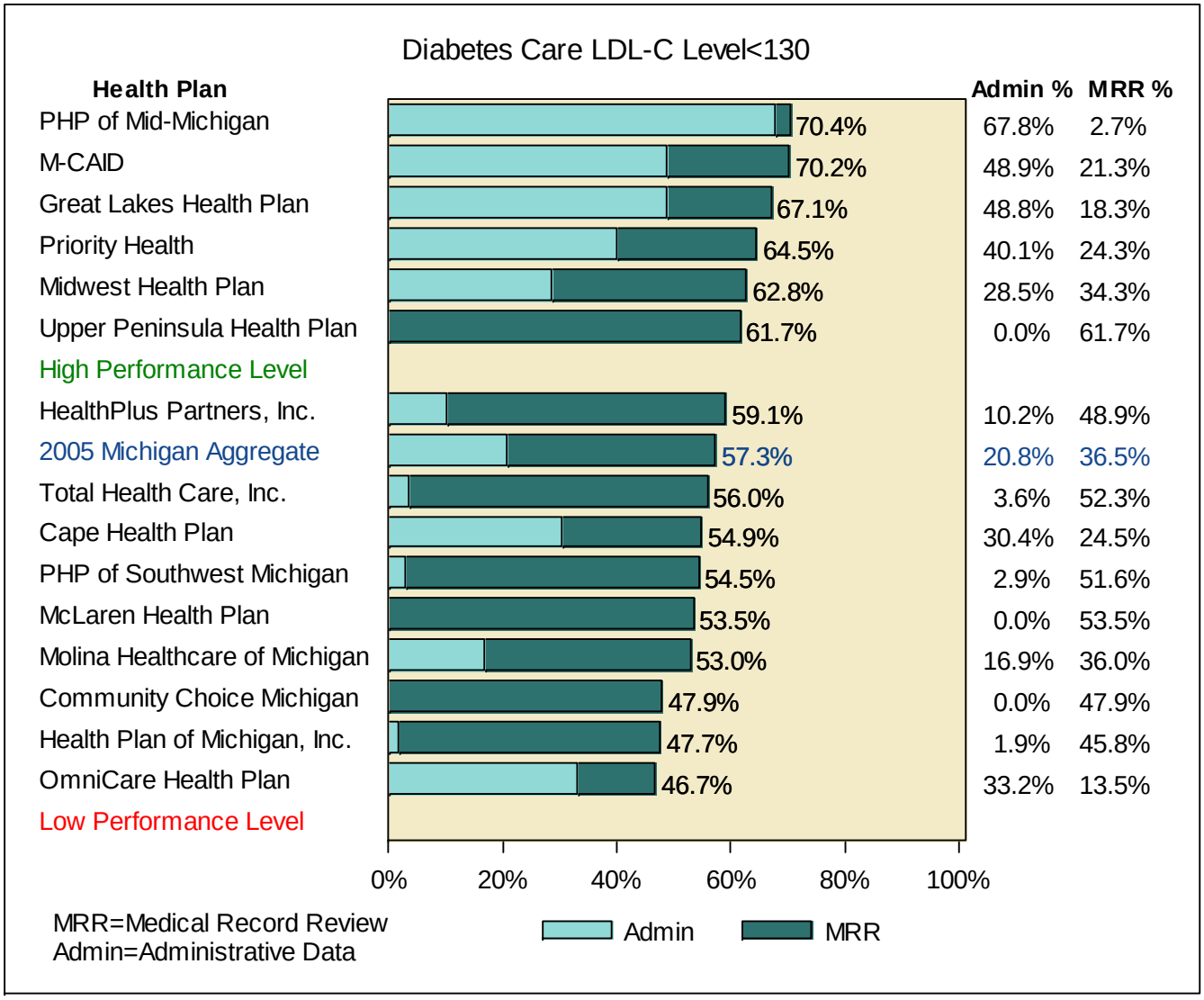
The 2005 Michigan Medicaid weighted average of 56.6 percent was 6.3 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 50.3 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004 of 8.0 percentage points. An increase of 12.8 percentage points was identified when compared to the 2003 Michigan Medicaid weighted average.

In 2004, three health plans reached the HPL and one health plan had a rate below the LPL. Overall, the range of reported rates demonstrated substantial improvement from 2004 to 2005.

Data Collection Analysis: Comprehensive Diabetes Care—LDL-C Level<130

Figure 5-10—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Comprehensive Diabetes Care—LDL-C Level<130



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans with reported rates elected to use the hybrid methodology to calculate this measure. The 2005 Michigan aggregate administrative rate was 20.8 percent and 36.5 percent for medical record review.

Overall, 36.3 percent of the aggregate rate was derived from administrative data and 63.7 percent from medical record review. In 2004, approximately 32.0 percent was derived from administrative data.

Six health plans derived more than half of their rates from administrative data, while three derived their rates entirely from medical record review.

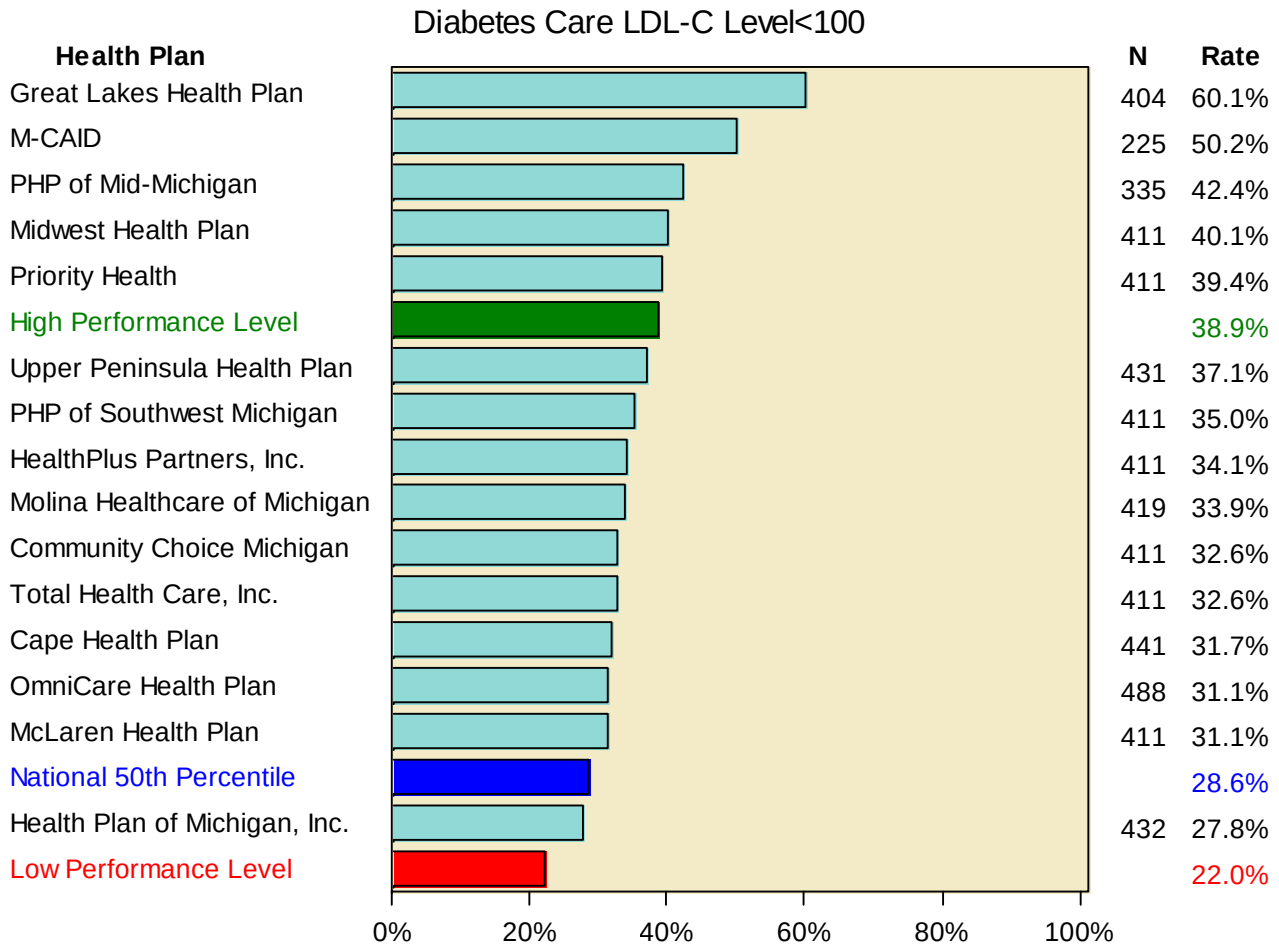
Although administrative data submission has shown some improvement for this measure, the rates were still dependent on medical record review. In conjunction with the LDL-C screening measure (see Figure 5-8), the results imply that administrative data was usually submitted for the screening, but the LDL-C screening level was not be captured administratively.

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

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

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

Figure 5-11—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—LDL-C Level<100



Five health plans reported rates above the HPL of 38.9 percent, while none of the health plans had rates below the LPL of 22.0 percent. Fourteen out of 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

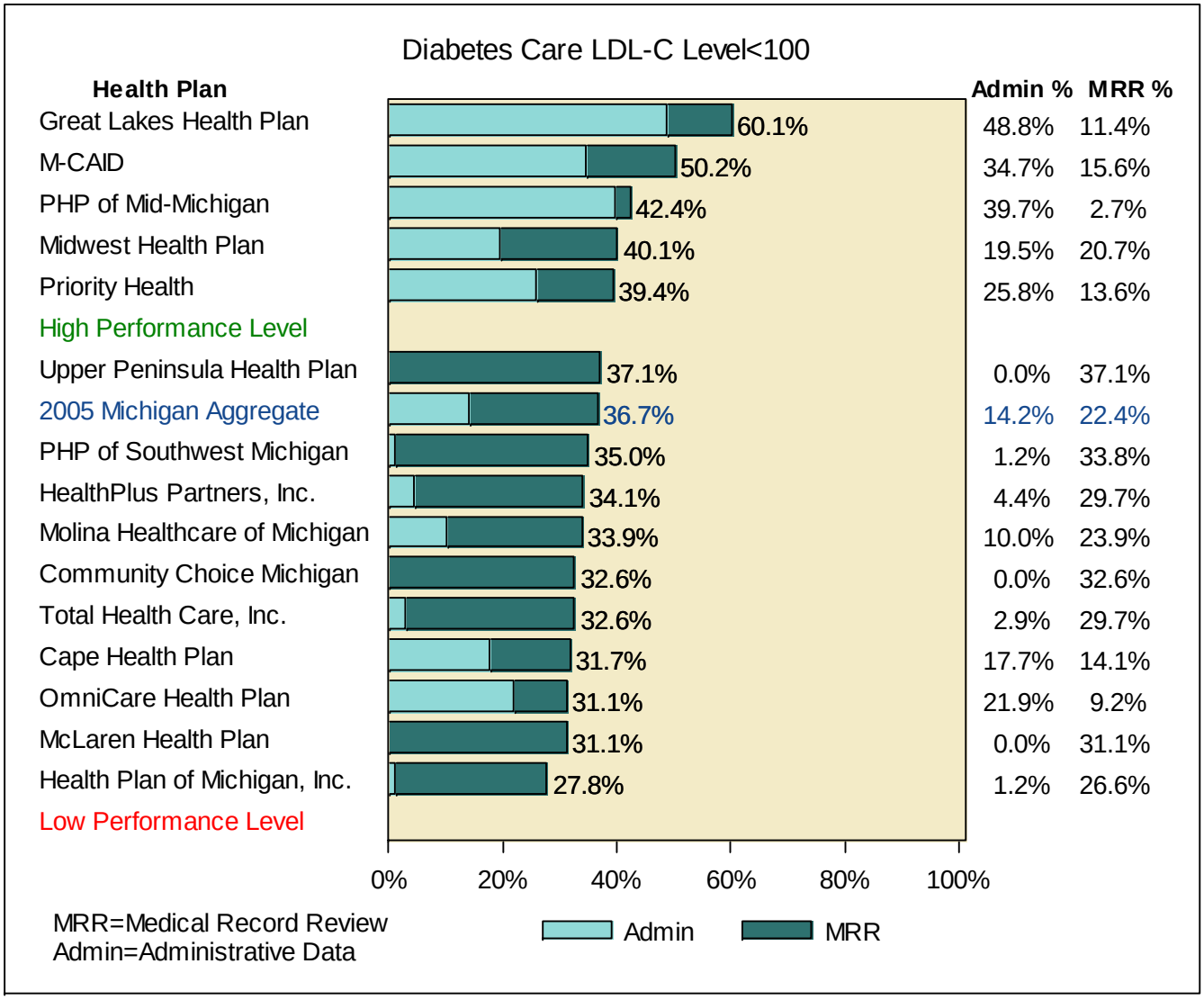
The 2005 Michigan Medicaid weighted average of 37.8 percent was 9.2 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 28.6 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004 of 8.7 percentage points.

Reported rates ranged from a low of 17.3 percent to a high of 46.7 percent in 2004. In 2005, the reported rates shifted upward, ranging from 27.8 percent to 60.1 percent. Overall, the range of reported rates showed considerable improvement from 2004 to 2005.

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

Figure 5-12—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Comprehensive Diabetes Care—LDL-C Level<100



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans with reported rates elected to use the hybrid methodology for calculation of this measure. The 2005 Michigan aggregate administrative rate was 14.2 percent and 22.4 percent for medical record review.

Overall, 38.7 percent of the aggregate rate was derived from administrative data and 61.0 percent from medical record review. In 2004, 34.0 percent was derived from administrative data.

Six health plans derived more than half of their rates from administrative data, while three derived their rates entirely from medical record review.

Although administrative data submission has shown some improvement for this measure, the rates were still dependent on medical record review. In conjunction with the LDL-C screening measure (see Figure 5-8), the results imply that administrative data was usually submitted for the screening, but the LDL-C screening level was not be captured administratively.

Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy

Diabetes is the leading cause of end-stage renal disease (ESRD). About 100,000 Americans have kidney failure as a result of uncontrolled diabetes.[5-18]

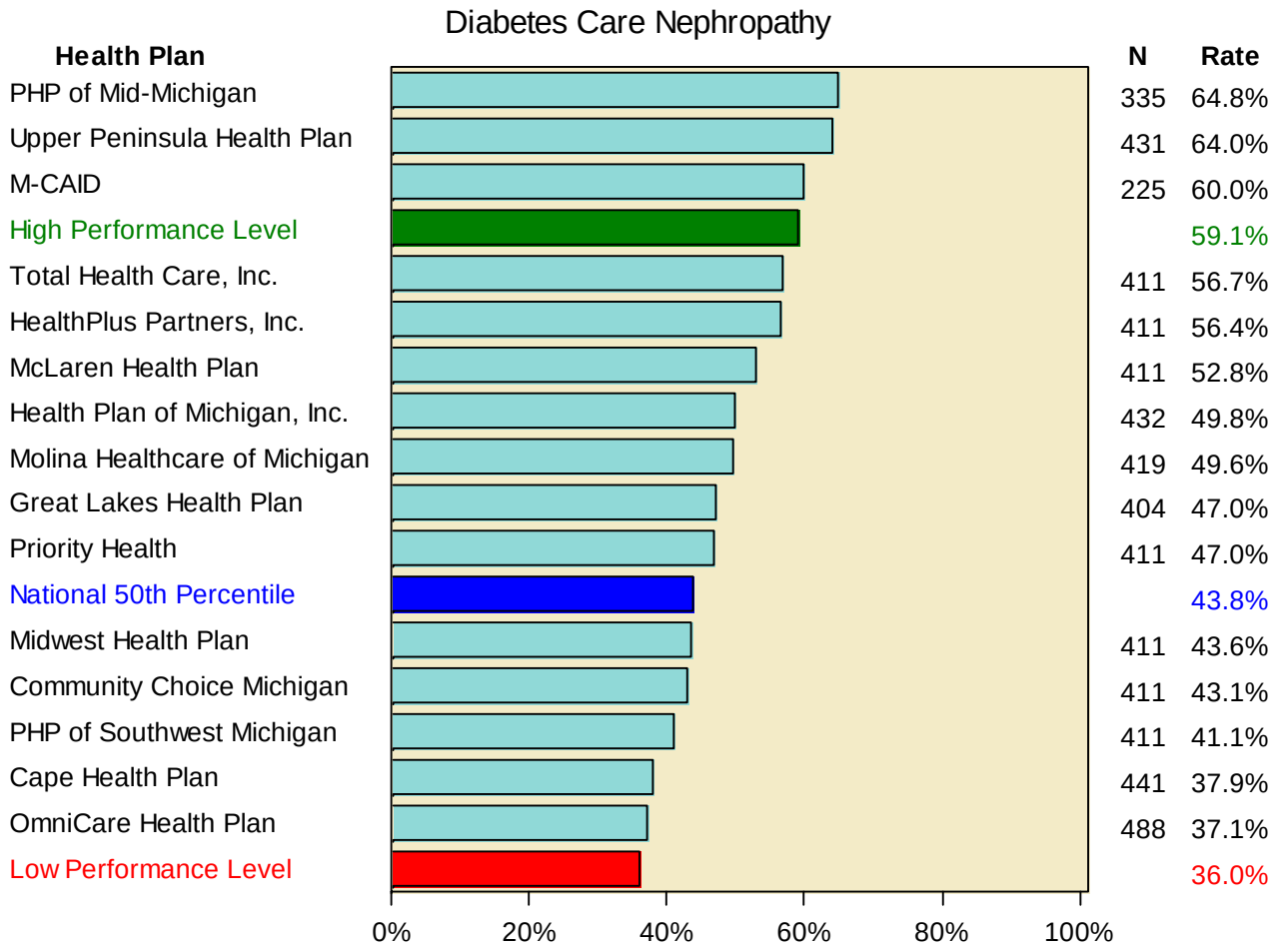
HEDIS Specification: Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy

The *Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy* rate is intended to assess whether diabetic patients are being monitored for nephropathy. It reports the percentage of members with diabetes (Type 1 and Type 2) aged 18 through 75 years old who were continuously enrolled during the measurement year and who were screened for nephropathy, or who received treatment for nephropathy, as documented through either administrative data or medical record review. The rate includes patients who have been screened for nephropathy, or who already have evidence of nephropathy as demonstrated by medical attention for nephropathy or a positive microalbuminuria test.

[5-18] National Committee for Quality Assurance. *The State of Managed Care Quality. 2001*. Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:47.

Health Plan Ranking: Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy

Figure 5-13—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy



Three health plans reported rates above the HPL of 59.1 percent, while none of the health plans had rates below the LPL of 36.0 percent. A total of 10 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

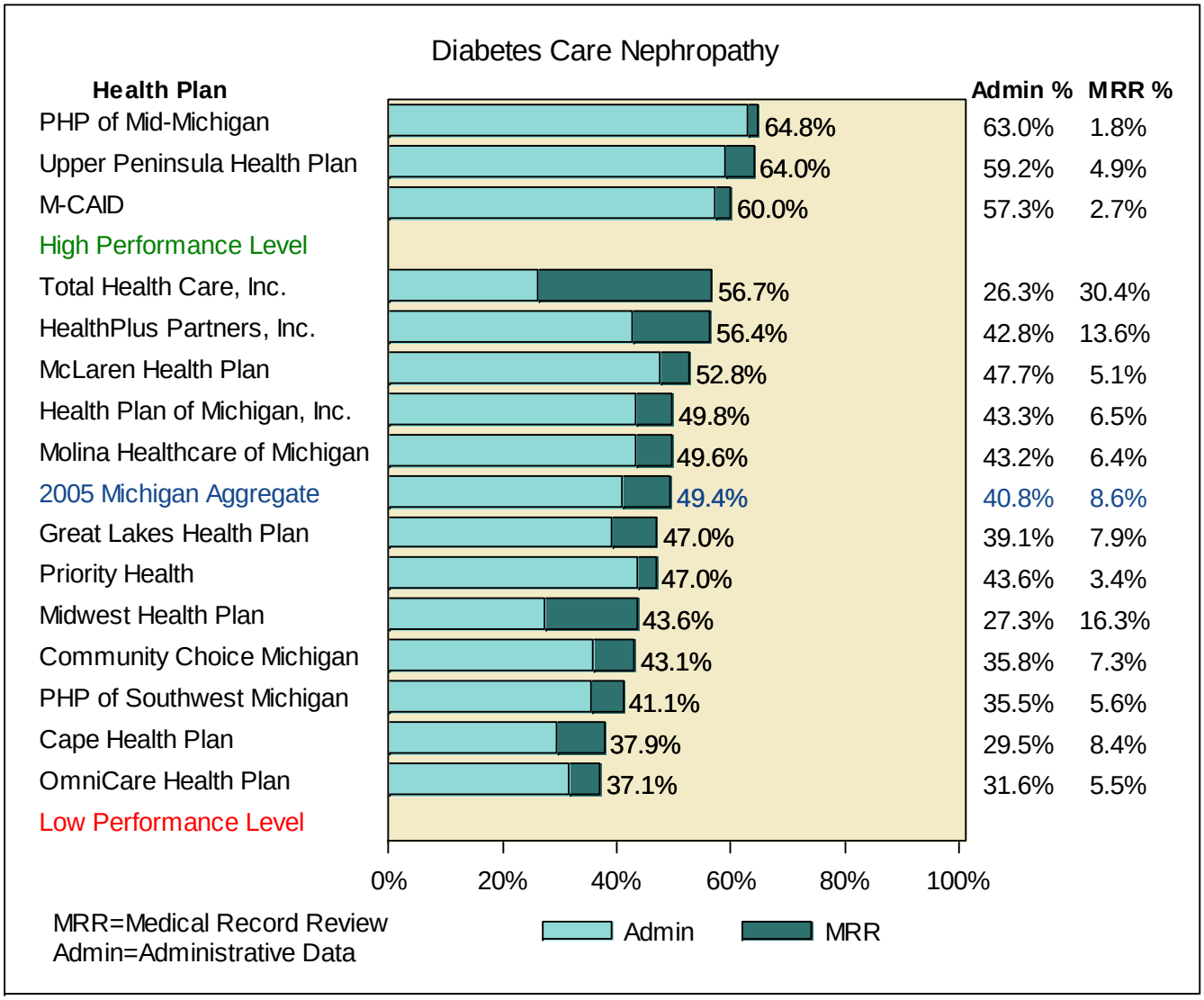
The 2005 Michigan Medicaid weighted average of 47.6 percent was 3.8 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 43.8 percent.

The 2005 Michigan Medicaid weighted average showed a statistically significant increase over 2004 of 6.9 percentage points. The 2003 Michigan Medicaid weighted average equaled the 2005 Michigan Medicaid weighted average.

In 2004, none of the health plans met the HPL and six health plans had rates below the LPL. Overall, the range of reported rates demonstrated improvement from 2004 to 2005.

Data Collection Analysis: Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy

Figure 5-14—Michigan Medicaid HEDIS 2005
Data Collection Analysis:
Comprehensive Diabetes Care—Monitoring for Diabetic Nephropathy



The figure above shows how much of the final rate for each health plan was derived from the administrative method (Admin) and how much from the medical record review (MRR). Note that, because of rounding differences, the sum of the Admin rate and the MRR rate may not always be exactly equal to the final rate.

All health plans with reported rates elected to use the hybrid methodology for calculation of this measure. The 2005 Michigan aggregate administrative rate for this measure was 40.8 percent and 8.6 percent for medical record review.

Results indicate that 82.6 percent of the aggregate rate was derived from administrative data, while 17.4 percent was derived from medical record review. In 2004, 82.0 percent of the aggregate rate was derived from administrative data.

As shown by Figure 5-14, administrative data completeness was not an issue with the majority of health plans for this measure. This implies that providers and/or laboratories routinely submitted claims or encounter data for diabetic members who received monitoring for nephropathy.

Use of Appropriate Medications for People With Asthma

In 2003, Asthma accounted for more than 12.7 million physician visits, 484,000 hospitalizations, and approximately 1.9 million ER visits in the United States.[5-19] It is one of the most common chronic conditions in both children and adults. The most current statistics show that approximately 6 million children and 16 million adults are affected.[5-20] In 2003, the current asthma prevalence rate reported for adults in Michigan was 9.3 percent of the population, higher than the United States rate of 7.7 percent.[5-21] Management of asthma is critical, and neglect of the condition frequently results in hospitalization, ER visits, and missed work and school days.

HEDIS Specification: Use of Appropriate Medications for People With Asthma

The measure is reported using the administrative method only. Rates for three age groups are reported: 5 to 9 years, 10 to 17 years, and 18 to 56 years, as well as a combined rate.

In addition to enrollment data, claims are used to identify the denominator. Members are identified for each denominator based on age and a two-year continuous enrollment criterion (the measurement year and the year prior to the measurement year). In addition, this measure requires that members be identified as having "persistent asthma." Persistent asthma is defined by the HEDIS specifications as having any of the following events within the year prior to the measurement year (in this case, 2003):

1. At least four asthma medication dispensing events, or
2. At least one Emergency Department visit with a principal diagnosis of asthma, or
3. At least one hospitalization with a principal diagnosis of asthma, or
4. At least four outpatient visits with a corresponding diagnosis of asthma and at least two asthma medication dispensing events.

This measure evaluates whether members with persistent asthma are being prescribed medications acceptable as primary therapy for long-term control of asthma. There are a number of acceptable therapies for people with persistent asthma, although the best available evidence demonstrates that inhaled corticosteroids are the preferred primary therapy. For people with moderate to severe asthma, inhaled corticosteroids are the only recommended primary therapy. While long acting beta-agonists are a preferred adjunct therapy for long-term control of moderate to severe asthma, their recommended use is as add-on therapy with inhaled corticosteroids. Therefore, they should not be included as counting by themselves in this numerator.[5-22]

For this particular measure, NCQA requires that rates be computed using the administrative methodology, so a data collection analysis is not relevant.

[5-19] American Lung Association Epidemiology & Statistics Unit. *Trends in Asthma Morbidity and Mortality*, Table 19. May 2005. Available at http://www.lungusa.org. Accessed on: September 15, 2005.

[5-20] National Committee of Quality Assurance. *The State of Managed Care Quality, 2001.* Standard Version. Washington, DC: National Committee for Quality Assurance; 2001:29.

[5-21] American Lung Association Epidemiology & Statistics Unit. *Trends in Asthma Morbidity and Mortality*, Tables 13 and 15. May 2005. Available at: http://www.lungusa.org. Accessed on September 15, 2005.

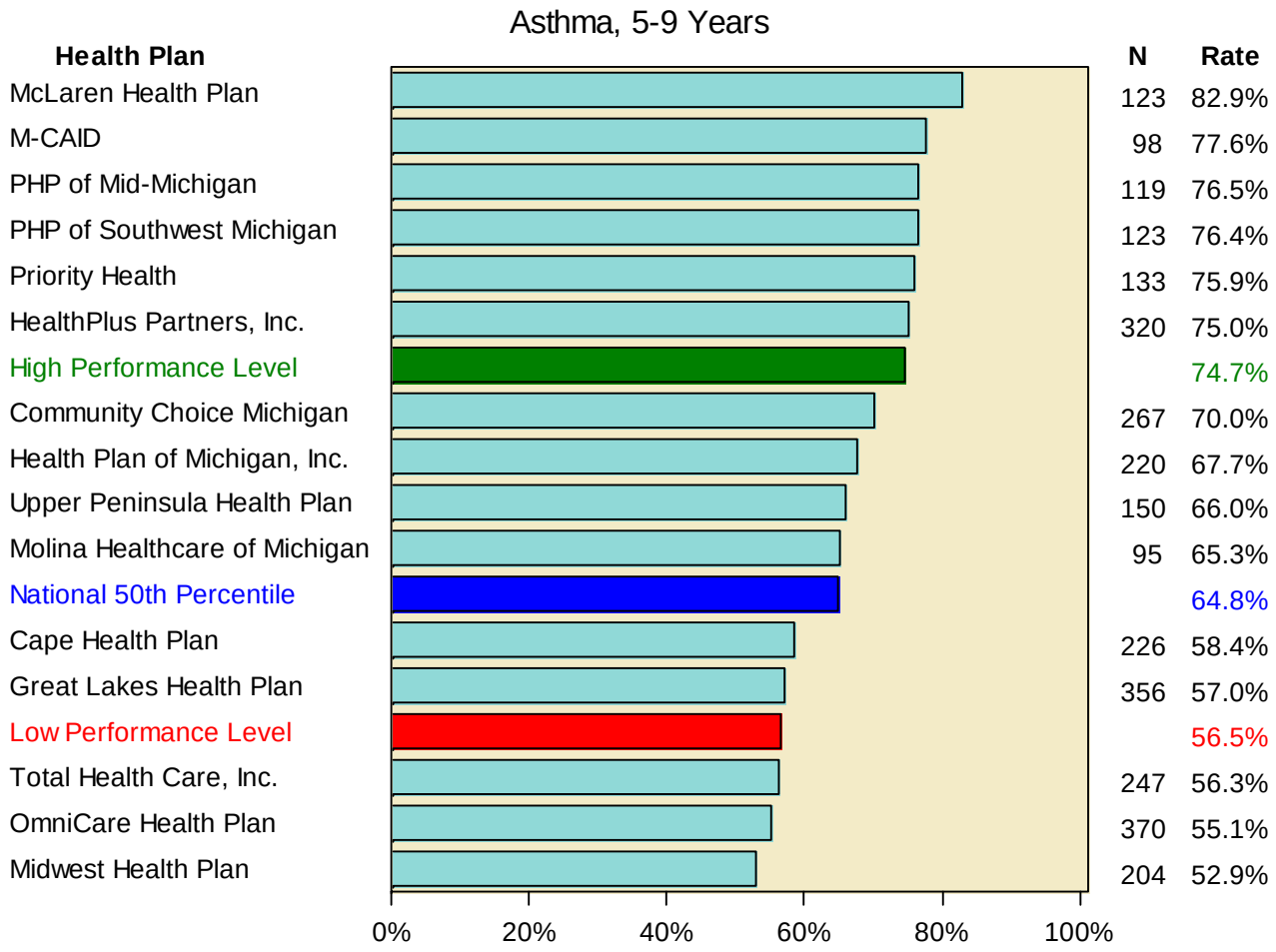
[5-22] National Committee for Quality Assurance. *HEDIS 2002 Technical Specifications.* Volume 2. Washington, DC: National Committee for Quality Assurance; 2001:96.

Use of Appropriate Medications for People With Asthma—Ages 5 to 9 Years

The *Use of Appropriate Medications for People With Asthma—Ages 5 to 9 Years* rate calculates the percentage of members aged 5 through 9 years who had been continuously enrolled for the measurement year and the year prior to the measurement year and who were identified as having "persistent asthma" as a result of any one of four specified events during the year prior to the measurement year and were prescribed medications that were acceptable as primary therapy for long-term asthma control.

Health Plan Ranking: Use of Appropriate Medications for People With Asthma—Ages 5 to 9 Years

Figure 5-15—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Use of Appropriate Medications for People With Asthma—Ages 5 to 9 Years



2005 Michigan Medicaid Weighted Average = 65.1%
2004 Michigan Medicaid Weighted Average = 61.0%
2003 Michigan Medicaid Weighted Average = 59.0%

Six of the health plans had rates above the HPL of 74.7 percent, while three health plans had rates below the LPL of 56.5 percent. A total of 10 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 65.1 percent was 0.3 of a percentage point above the national HEDIS 2004 Medicaid 50th percentile of 64.8 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 4.1 percentage points, and 6.1 percentage points above the 2003 Michigan Medicaid weighted average of 59.0 percent.

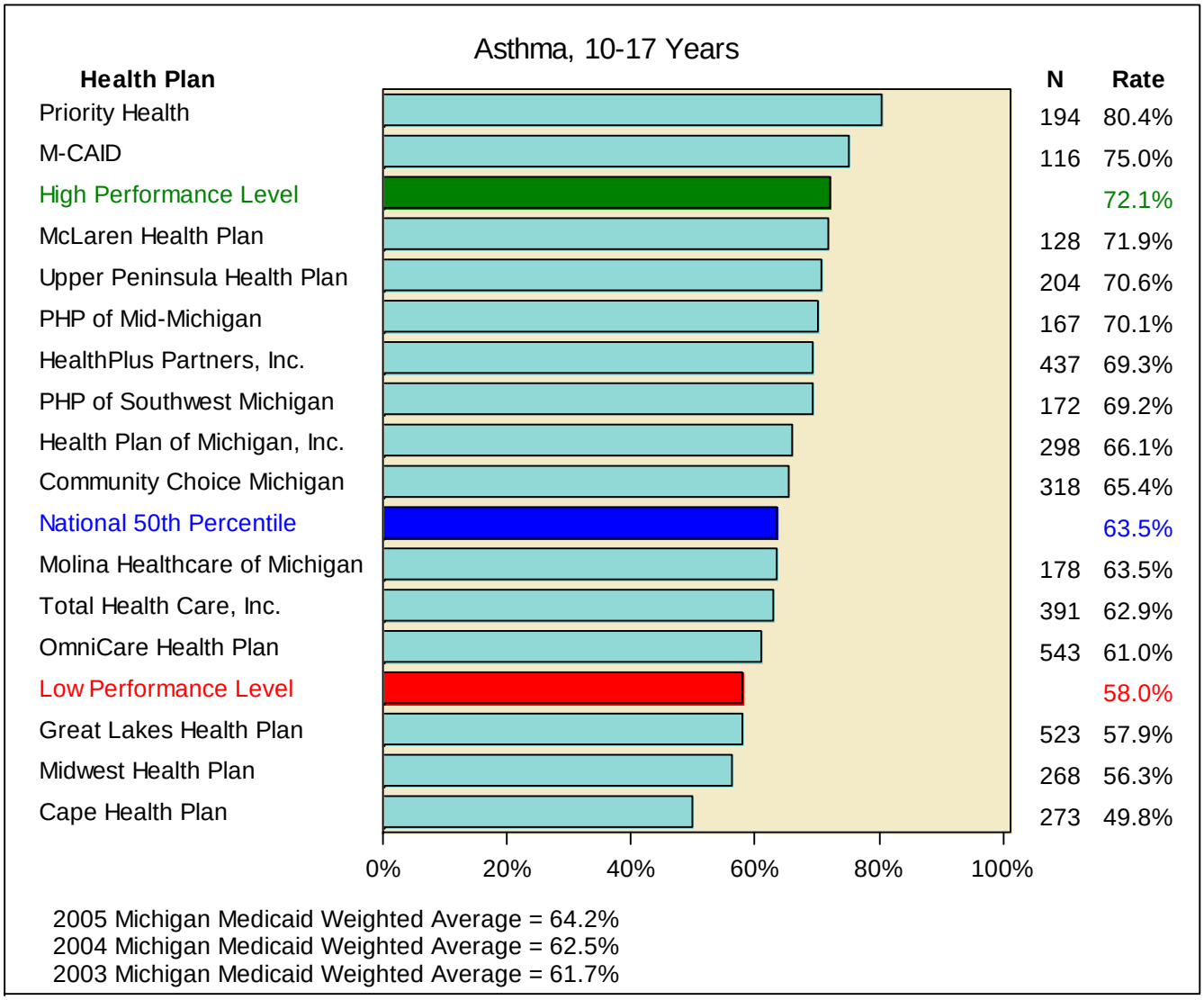
In 2004, six health plans reported rates above the HPL, and two had rates below the LPL. Although three health plans fell below the LPL in 2005, the overall range of reported rates improved slightly from 2004 to 2005.

Use of Appropriate Medications for People With Asthma—Ages 10 to 17 Years

The rate for *Use of Appropriate Medications for People With Asthma—Ages 10 to 17* calculates the percentage of members aged 10 through 17 years who had been continuously enrolled for the measurement year and the year prior to the measurement year, who were identified as having "persistent asthma" as a result of any one of four specified events during the year prior to the measurement year, and who were prescribed medications that were acceptable as primary therapy for long-term asthma control.

Health Plan Ranking: Use of Appropriate Medications for People With Asthma—Ages 10 to 17 Years

Figure 5-16—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Use of Appropriate Medications for People With Asthma—Ages 10 to 17 Years



Two of the 15 health plans had rates above the HPL of 72.1 percent, while nine health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 64.2 percent was 0.7 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 63.5 percent.

The 2005 Michigan Medicaid weighted average showed a slight increase over 2004, up 1.7 percentage points. An increase of 2.5 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 61.7 percent.

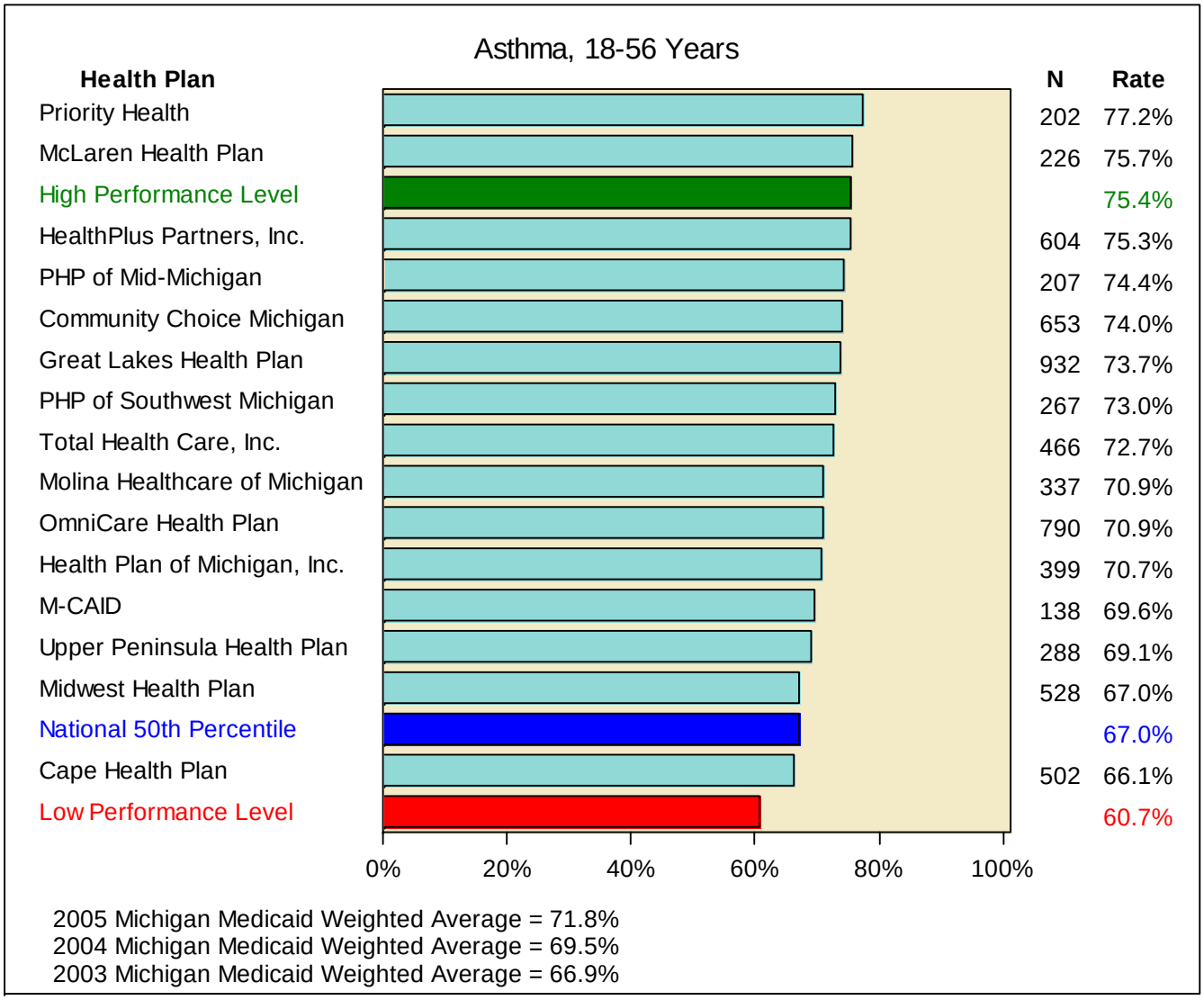
Reported rates ranged from a low of 52.5 percent to a high of 84.0 percent in 2004. In 2005, the reported rates shifted downward, ranging from 49.8 percent to 80.4 percent.

Use of Appropriate Medications for People With Asthma—Ages 18 to 56 Years

Use of Appropriate Medications for People With Asthma—Ages 18 to 56 measures the percentage of members aged 18 through 56 years who had been continuously enrolled for the measurement year and the year prior to the measurement year, who were identified as having "persistent asthma" as a result of any one of four specified events during the year prior to the measurement year, and who were prescribed medications that were acceptable as primary therapy for long-term asthma control.

Health Plan Ranking: Use of Appropriate Medications for People With Asthma—Ages 18 to 56 Years

Figure 5-17—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Use of Appropriate Medications for People With Asthma—Ages 18 to 56 Years



Two health plans had rates above the HPL of 75.4 percent, while none of the health plans had rates below the LPL. A total of fourteen health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 71.8 percent was 4.8 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 67.0 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 2.3 percentage points, and 4.9 percentage points more than in 2003.

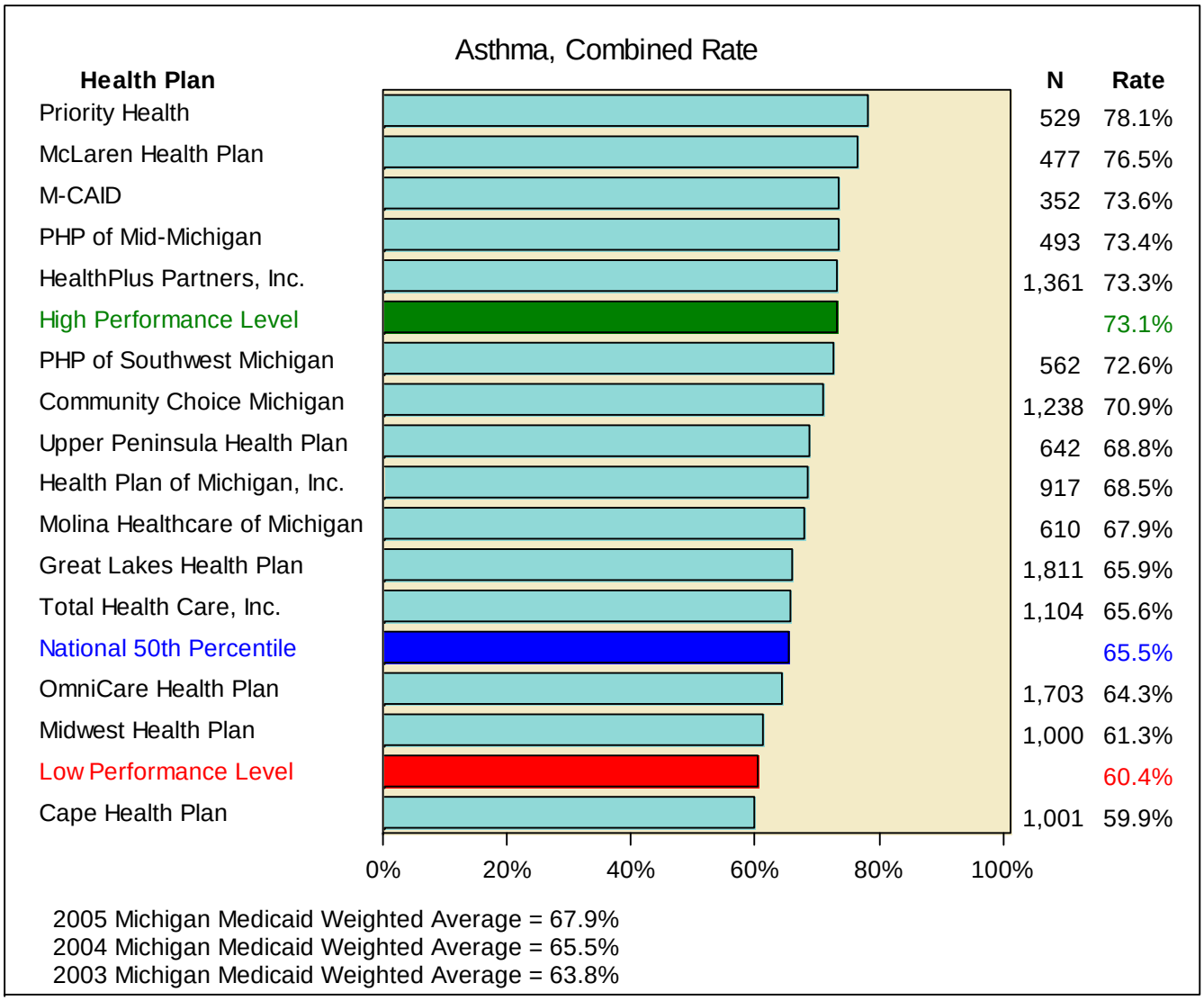
In 2004, two health plans reported rates above the HPL, and one health plan had a rate below the LPL. Overall, the range of reported rates showed a slight improvement from 2004 to 2005.

Use of Appropriate Medications for People With Asthma—Combined Rate

The *Use of Appropriate Medications for People With Asthma—Combined Rate* calculates the sum of the three age-group numerators divided by the sum of the three denominators.

Health Plan Ranking: Use of Appropriate Medications for People With Asthma—Combined Rate

Figure 5-18—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Use of Appropriate Medications for People With Asthma—Combined Rate



Five health plans had rates above the HPL of 73.1 percent, while one health plan had a rate below the LPL. A total of 12 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 67.9 percent was 2.4 percentage points above the national HEDIS 2004 Medicaid 50th percentile of 65.5 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 2.4 percentage points, and 4.1 percentage points greater than in 2003.

In 2004, four health plans reported rates above the HPL, and two health plans had rates below the LPL. Overall, the range of reported rates showed a slight improvement from 2004 to 2005.

Controlling High Blood Pressure

High blood pressure has long been referred to as the "silent killer" in the medical community. It is a major risk factor for developing cardiovascular disease, stroke, and heart failure. According to the Healthy People 2010 *Information Access Project Report on Heart Disease and Stroke*, death rates due to cardiovascular disease and stroke have declined over the past 30 years, mainly due to improvements in detection and treatment of high blood pressure.[5-23] The Behavioral Risk Factor Surveillance System data indicate that 27.3 percent of adults in Michigan had high blood pressure in 2002.[5-24] Blood pressure is the most important factor in preserving kidney function and is critical in reducing the risk of stroke up to 50 percent.[5-25] In Michigan, diseases of the heart, including high blood pressure, were the most common causes of death in 2001, responsible for 26,896 deaths, or 31 percent of all deaths.[5-26]

HEDIS Specification: Controlling High Blood Pressure

The *Controlling High Blood Pressure* measure assesses if blood pressure was controlled for adults with diagnosed hypertension. This measure calculates the percentage of members aged 46 through 85 years who were continuously enrolled for the measurement year, who had an ambulatory claim or encounter with a diagnosis of hypertension that was confirmed within the medical record, and whose blood pressure was controlled at 140/90 mm hg or less.

[5-23] Healthy People 2010 Information Access Project Report on Heart Disease and Stroke. Available at: http://www.healthypeople.gov/document/html/volume1/12heart.htm. Accessed on August 17, 2005.

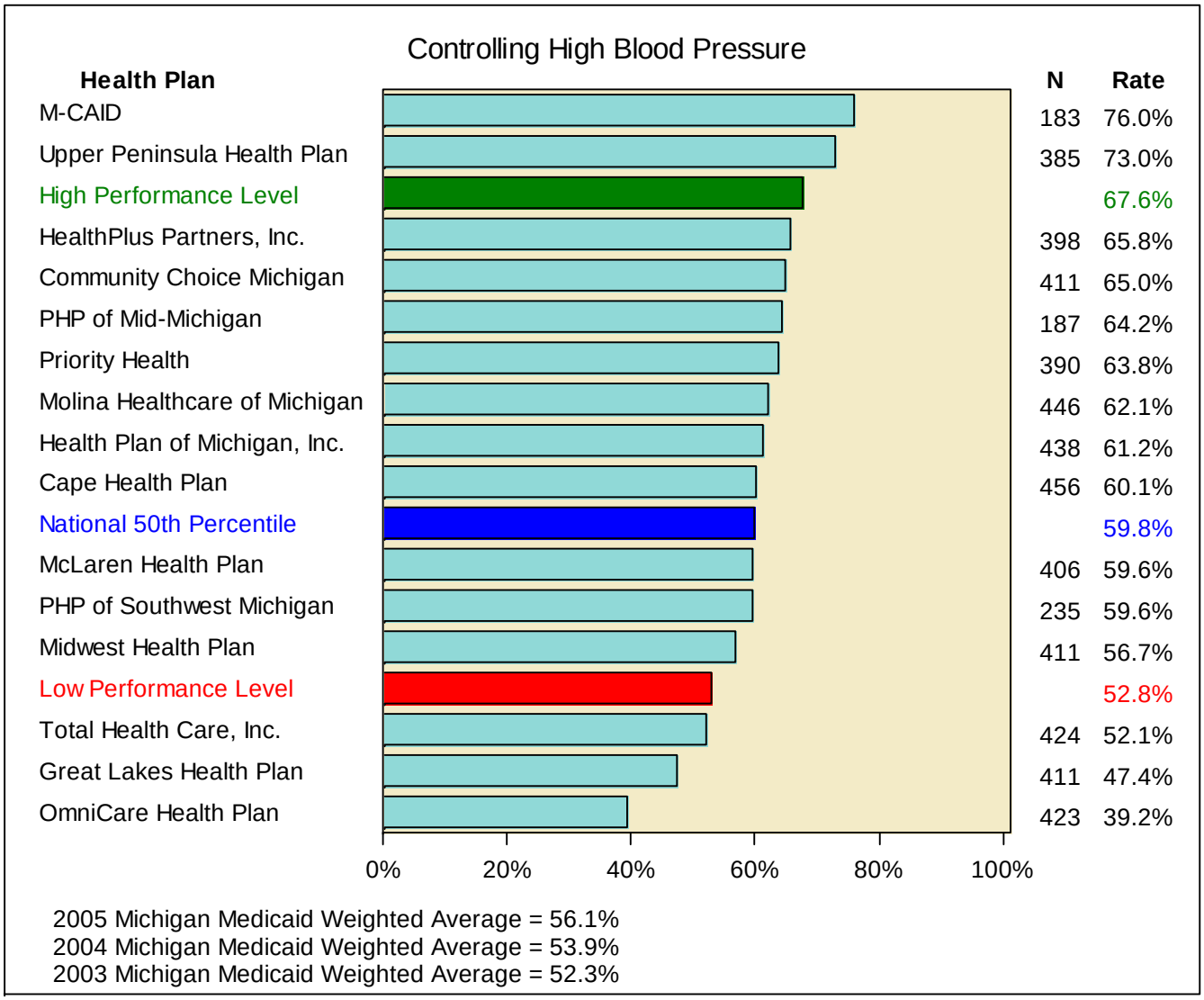
[5-24] Centers for Disease Control and Prevention. The Burden of Chronic Diseases and Their Risk Factors, 2004. Available at: http://www.cdc.gov/nccdphp/burdenbook2004/Section03/bloodpres.htm. Accessed on August 17, 2005.

[5-25] Michigan Department of Community Health. 2004 CVD Fact Sheet. Available at: http://www.michigan.gov/documents/cvdfact03_78179_7.pdf. Accessed on August 17, 2005.

[5-26] Centers for Disease Control and Prevention. The Burden of Chronic Diseases and Their Risk Factors, 2004. Available at: http://www.cdc.gov/nccdphp/burdenbook2004/pdf/burden_book2004.pdf. Accessed on August 17, 2005.

Health Plan Ranking: Controlling High Blood Pressure

Figure 5-19—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Controlling High Blood Pressure



Two health plans had rates above the HPL of 67.6 percent, while three health plans reported rates below the LPL. A total of nine health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 56.1 percent fell below the national HEDIS 2004 Medicaid 50th percentile of 59.8 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 2.2 percentage points, and 3.8 percentage points greater than the 2003 Michigan Medicaid weighted average of 52.3 percent.

Reported rates ranged from a low of 39.7 percent to a high of 72.5 percent in 2004. In 2005, the reported rates ranged from 39.2 percent to 76.0 percent. Minimal improvement in the range of reported rates was identified from 2004 to 2005.

Medical Assistance With Smoking Cessation—Advising Smokers to Quit

Michigan currently has the sixth highest rate of adult smokers in the nation. State rates have shown a slight decline since 1998, with the most recent data showing 26.2 percent of adults smoking in 2003 compared to 27.4 percent in 1998.[5-27] In 2001, rates were high for some vulnerable populations: 43 percent of women enrolled in the Michigan Women, Infants, and Children's (WIC) program smoked prior to pregnancy and 30 percent smoked during pregnancy. [5-28] Smoking during pregnancy increases the risk of infant mortality and low birth weight. Children of smokers experience higher rates of asthma than children of nonsmokers.

The MDCH has many ongoing efforts to decrease the use of tobacco, including offering free self-help smoking cessation kits and implementing a statewide task force to assist with regulations and ordinances aimed at clean indoor air and smoke-free businesses. Ongoing efforts also include smoking cessation programs for pregnant women, counseling for WIC enrollees on the dangers of smoking and second-hand smoke, college initiatives, community education programs, and support of activities related to the Youth Tobacco Act.

Many smokers have been unable to quit, even when they know the negative health effects, and know that eliminating tobacco is the single most important step they can take to improve their health. Seven different studies involving brief physician advice to quit (less than three minutes) were analyzed, with results showing that 2.3 percent more patients quit after this minimal intervention than patients with no intervention.[5-29] This shows that even a brief message that is clear, strong, and personalized can have a positive effect on future smoking behavior.

HEDIS Specification—Advising Smokers to Quit

The *Medical Assistance With Smoking Cessation* measure is collected using the CAHPS survey. *Advising Smokers to Quit* is one component (or rate) reported for the measure. *Advising Smokers to Quit* calculates the percentage of members aged 18 years or older who were continuously enrolled during the measurement year, who were either smokers or recent quitters, who were seen by an MHP practitioner during the measurement year, and who received advice to quit smoking.

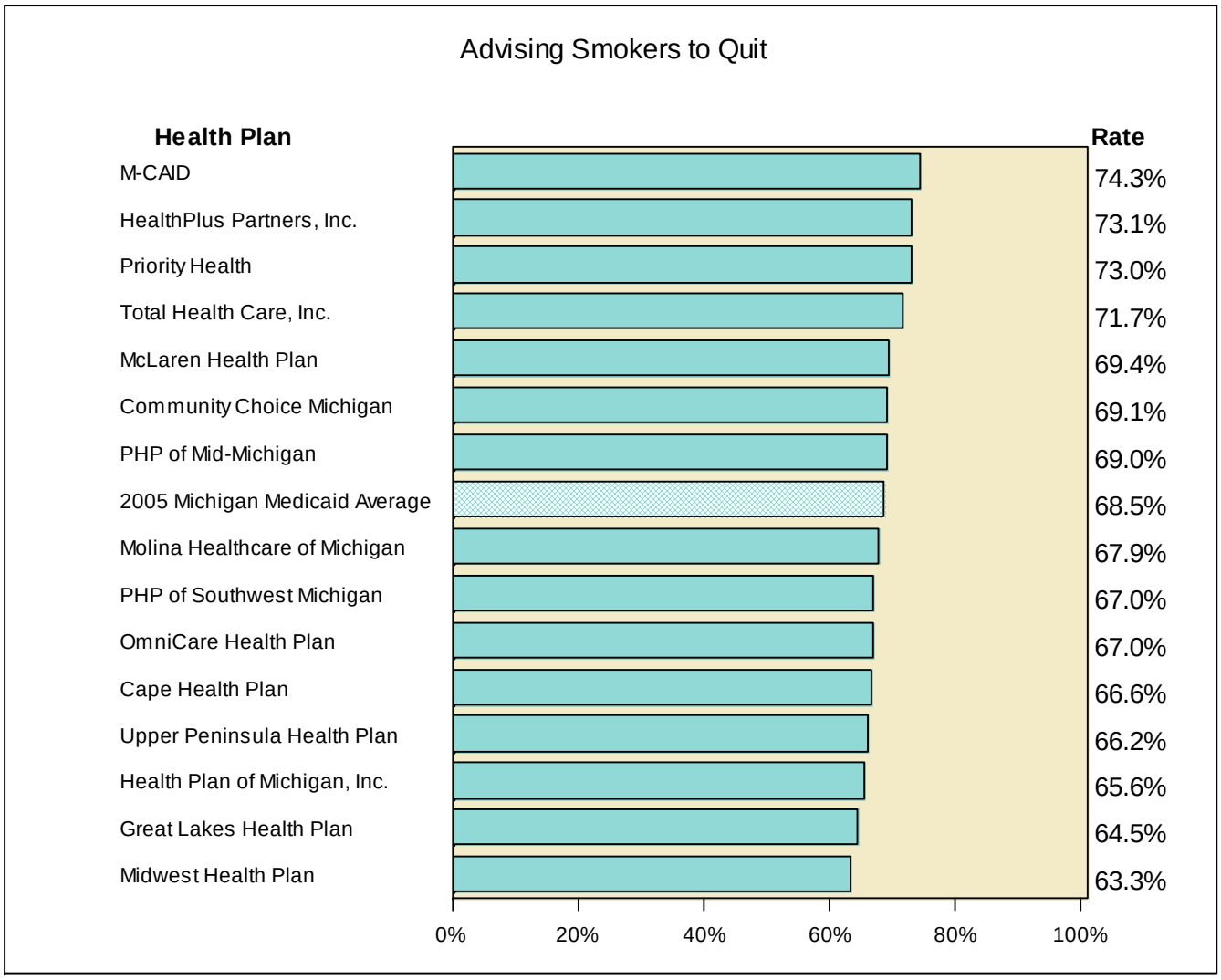
[5-27] Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System (BRFSS). Available at: http://www.cdc.gov/brfss/. Accessed on September 21, 2005.

[5-28] Michigan Department of Community Health. Critical Health Indicators 2003. Available at: http://www.michigan.gov/documents/Cigarette_Smoking_April_02_23534_7.pdf. Accessed on August 18, 2005.

[5-29] Smith SS, Fiore MC. The Epidemiology of Tobacco Use, Dependence, and Cessation in the United States. *Primary Care, Clinics in Office Practice*; September 1999; 26(3):433-61.

Health Plan Ranking: Medical Assistance with Smoking Cessation—Advising Smokers to Quit

Figure 5-20—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Medical Assistance with Smoking Cessation—Advising Smokers to Quit



For this measure, 7 of the 15 health plans had rates above the 2005 Michigan Medicaid Average of 68.5 percent. The rates reported by the 15 health plans ranged from 63.3 percent to 74.3 percent.

Living With Illness Findings and Recommendations

Although all of the measures for *Comprehensive Diabetes Care* improved over 2004, the most significant changes were reported for the screening indicators (i.e., HbA1c testing, eye exams, LDL-C screening, and monitoring for nephropathy). These improvements in the rates were reported even though national trends showed declines in the screening rates for eye exams and monitoring for nephropathy, most likely due to minor changes in the technical specifications.

Along with the improvement in screening rates for *Comprehensive Diabetes Care*, the actual results for HbA1c and LDL-C levels showed overall improvements. There were fewer members with poor HbA1c control, and significantly more members whose LDL-C levels were lower (i.e., both under 130 and under 100). This positive trend may show even more improvement if laboratory results can be obtained electronically that provide the detailed information (such as actual HbA1c level) required for HEDIS reporting.

The health plans showed better than average performance for the asthma measures. For the third year, the rates improved across all age groups. Twelve of the 15 health plans reported rates for the combined ages above the HEDIS 2004 Medicaid 50th percentile of 65.5 percent, and five health plans reported rates above the HPL of 73.1 percent. The combined rate was largely affected by the rates for the specific 18-56 year old age group, where 14 out of 15 health plans reported rates above the HEDIS 2004 Medicaid 50th percentile of 67.0 percent. For the two younger age groups (i.e., 5-9 and 10-17 years of age), health plans that reported the lowest rates generally did so for both age groups.

Given the fact that 12 out of the 15 combined rates were above the HEDIS 2004 Medicaid 50th percentile, while the younger age groups had six health plans below the 50th percentile, it appears there may be differences for these six health plans in how physicians provide treatment for members with asthma, or the younger members may not be compliant with their asthma medication regimen. To improve the combined rate, an emphasis should be placed on improving the rates for the younger age groups.

The 2005 Michigan Medicaid weighted average for *Controlling High Blood Pressure* was below the HEDIS 2004 Medicaid 50th percentile of 59.8 percent. Nationally, this measure has seen significant improvement in the Medicaid rates. However, for Michigan, this measure has shown very little change, going from 52.3 percent in 2003 to 56.1 percent by 2005. Despite the relatively small improvement in the reported rates, nine health plans were above the HEDIS 2004 Medicaid 50th percentile, and two of those health plans were above the HPL of 67.6 percent. The rates ranged from a low of 39.2 percent to a high of 76.0 percent, or a span of 36.8 percentage points. This potentially indicates there was a wide range of treatment, compliance, and/or patient severity among the health plans. Health plans should explore intervention strategies, such as case management, to lower blood pressure in members with hypertension. Those health plans with rates above the HPL should be encouraged to share best practices with the State and the other health plans to promote better health among the Michigan Medicaid population.

The rates for *Advising Smokers to Quit* ranged from 63.3 percent to 74.3 percent. Seven health plans had rates above the 2005 Michigan Medicaid weighted average of 68.5 percent. Interestingly, five of those seven health plans also had the highest rates for *Controlling High Blood Pressure*.

Although these measures are not directly related, the medical link between high blood pressure and smoking is well known, and there is a potential for physicians to be more aware and consequently treat members who both smoke and have high blood pressure. Regardless, health plans should use this example to educate providers. Providers should be encouraged to advise all smokers to quit, and document their efforts in the medical record. Additional strategies, such as case management, should be used for those members who smoke and have hypertension.

The use of administrative data to report HEDIS measures has improved over 2004. With the exception of the measures that require laboratory data, the majority of the data for *Comprehensive Diabetes Care* was obtained through administrative claims and encounter data. The rates for *Use of Appropriate Medications for People with Asthma* were also good, though this was an administrative measure only and did not allow for medical record review. These findings suggest that data completeness for claims and encounter data, including pharmacy data, was not an issue. However, obtaining laboratory data with actual results was an issue for some health plans. Obtaining laboratory results for health plan members may greatly reduce the burden and associated costs of medical record review. Actual laboratory results can (and should) also be used to more efficiently target and/or case manage members who appear to need additional help in achieving an appropriate therapeutic level of care. Health plans should explore possible avenues to receive all laboratory data, including updating contractual obligations, if necessary.

Overall, Michigan health plans performed well for members in the Living With Illness dimension. Health plan interventions should include, at a minimum, efforts to improve the submission and capture of complete laboratory data, including specific laboratory results (e.g., HbA1c levels and LDL-C screening levels). Health plans should also focus on the *Controlling High Blood Pressure* measure.

6. Access to Care

Introduction

Access to care is the foundation for diagnosing and treating health problems and for increasing the quality and years of healthy life. Establishing a relationship with a primary care practitioner is essential to improving access to care for both adults and children. The public health system, health plans, and health care researchers focus on identifying barriers to the use of existing health services and eliminating disparities in order to increase access to quality care. By breaking down barriers to care and improving access, health plans can increase preventive care and successful management of disease processes.

The Center for Studying Health System Change (HSC) noted an increase in Americans' access to needed medical care from 2001 through 2003.[6-1] An HSC study published in 2004 used survey data to identify trends in increased access and potential delays in seeking needed care. Although access to care increased even among uninsured and low-income Americans, it was noticed that disparities still existed. A recent article in the *Journal of the American Medical Association (JAMA)* noted that the type of insurance coverage (or lack of insurance) had a significant impact on the ability to obtain timely access to care.[6-2] Individuals with Medicaid coverage were found to be less likely to receive an appointment than those with private coverage (34.2 percent for Medicaid compared with 63.3 percent for private insurance).

Interestingly, there are relatively few examples of effective improvement strategies to target access-to-care issues. Few health plans identify access to care as a specific quality improvement topic, and even a literature search yielded minimal sources of information on improvement efforts.

The following pages provide detailed analysis of Michigan MHP performance and ranking. For all measures in this dimension, HEDIS methodology requires that the rates be derived using only the administrative method. Medical record review is not permitted, and therefore a data collection analysis is not relevant.

The Access to Care dimension encompasses the following MDCH key measures:

- **Children's and Adolescents' Access to Primary Care Practitioners**
  - *Children's and Adolescents' Access to Primary Care Practitioners—Ages 12 to 24 Months*
  - *Children's and Adolescents' Access to Primary Care Practitioners—Ages 25 Months to 6 Years*
  - *Children's and Adolescents' Access to Primary Care Practitioners—Ages 7 to 11 Years*
  - *Children's and Adolescents' Access to Primary Care Practitioners—Ages 12 to 19 Years*
- **Adults' Access to Preventive/Ambulatory Health Services**
  - *Adults' Access to Preventive/Ambulatory Health Services—Ages 20–44 Years*
  - *Adults' Access to Preventive/Ambulatory Health Services—Ages 45–64 Years*

[6-1] Strunk BC, Cunningham PJ. *Trends in Americans' Access to Needed Medical Care, 2001–2003.* Center for Studying Health System Change: Tracking Report No. 10. August 2004. Available at: http://hschange.org/CONTENT/701/?topic=topic02. Accessed on: October 7, 2005.

[6-2] Asplin BR, Rhodes KV, Levy H, et al. Insurance Status and Access to Urgent Ambulatory Care Follow-up Appointments. *Journal of the American Medical Association*.. 2005; 294:1248–1254. Available at: http://jama.ama-assn.org/cgi/content/abstract/294/10/1248?maxtoshow=&HITS=10&hits. Accessed on: October 7, 2005.

Children's and Adolescents' Access to Primary Care Practitioners

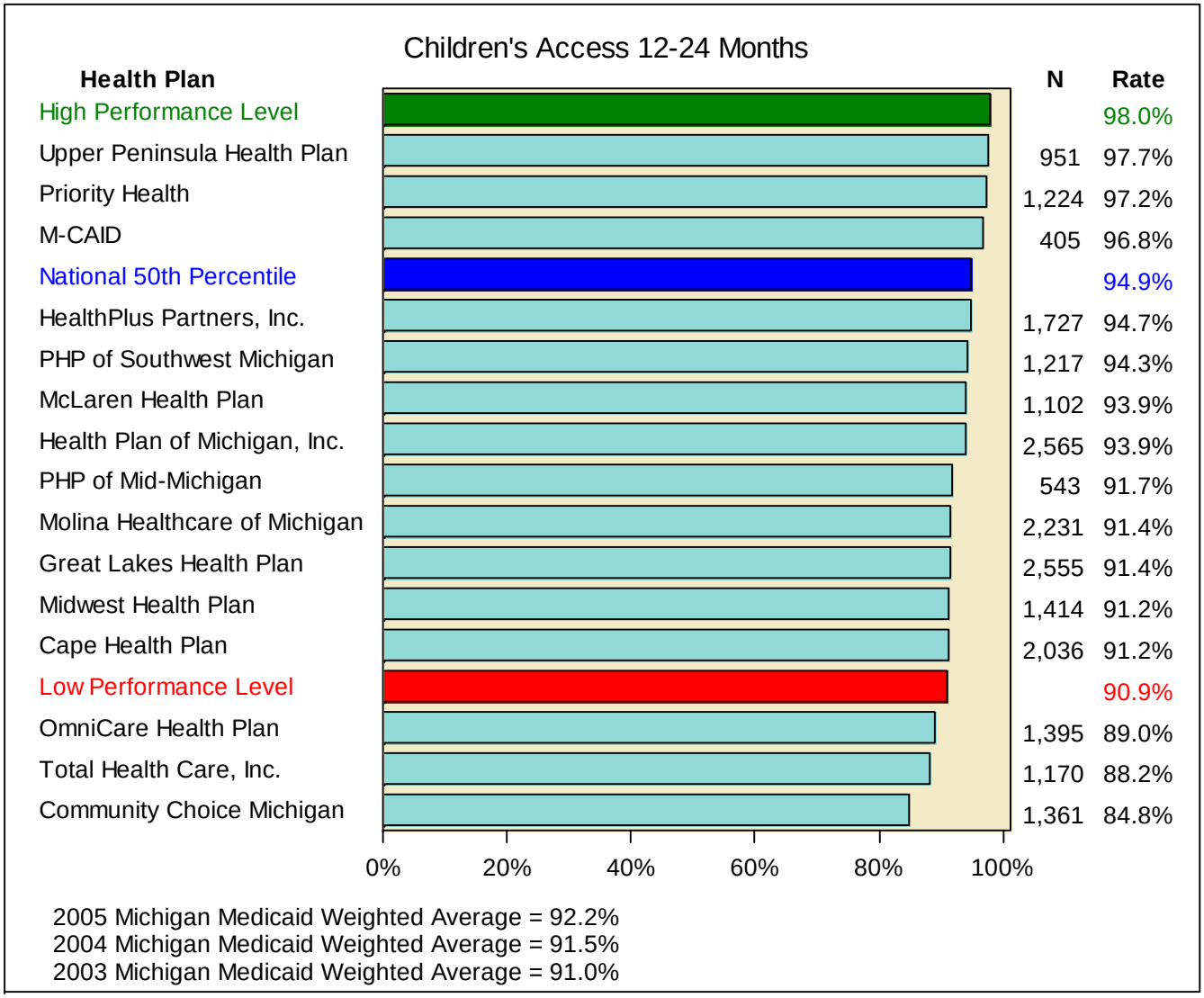
The *Children's and Adolescents' Access to Primary Care Practitioners* measure looks at visits to pediatricians, family physicians, and other primary care providers as a way to assess general access to care for children. Rates for four age groups are provided: 12 to 24 months, 25 months to 6 years, 7 to 11 years, and 12 to 19 years.

HEDIS Specification: Children's and Adolescents' Access to Primary Care Practitioners —Ages 12 to 24 Months

Children's and Adolescents' Access to Primary Care Practitioners—Ages 12 to 24 Months calculates the percentage of members aged 12 through 24 months who were continuously enrolled during the measurement year and who had a visit with an MHP primary care practitioner during the measurement year.

Health Plan Ranking: Children's and Adolescents' Access to Primary Care Practitioners —Ages 12 to 24 Months

Figure 6-1—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Children's and Adolescents' Access to Primary Care Practitioners—Ages 12 to 24 Months



None of the health plans met the HPL of 98.0 percent, while three health plans reported rates below the LPL of 90.9 percent. Three of the 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 92.2 percent was 2.7 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 94.9 percent.

The 2005 Michigan Medicaid weighted average was slightly higher than in 2004, up 0.7 of a percentage point. A gain of 1.2 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 91.0 percent.

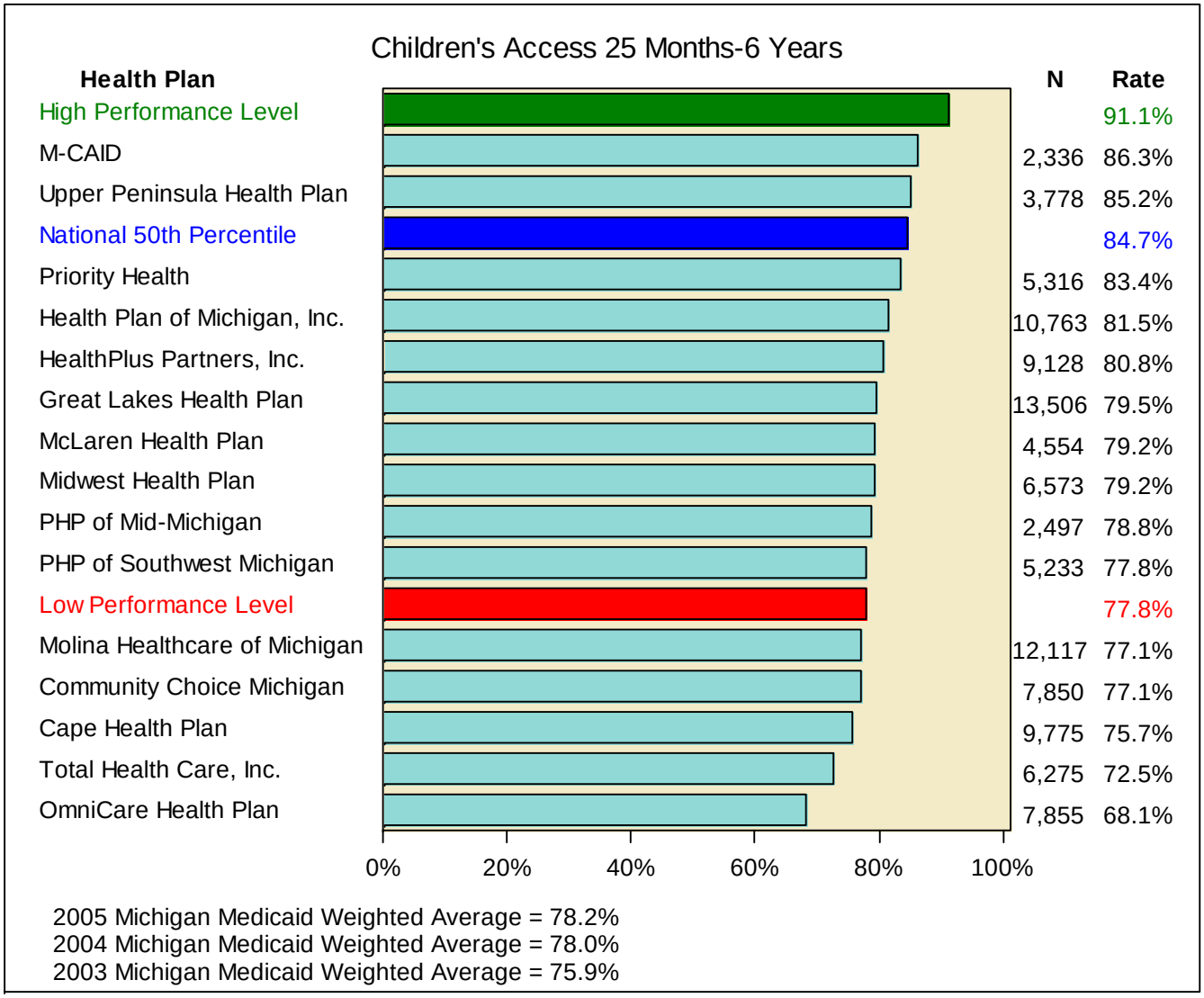
Two health plans reached the HPL in 2004, while five health plans had rates below the LPL. Overall, the range of reported rates showed no improvement in 2005 when compared to 2004.

HEDIS Specification: Children's Access to Primary Care Practitioners —Ages 25 Months to 6 Years

Children's and Adolescents' Access to Primary Care Practitioners—Ages 25 Months to 6 Years reports the percentage of members aged 25 months through 6 years who were continuously enrolled during the measurement year and who had a visit with an MHP primary care practitioner during the measurement year.

Health Plan Ranking: Children's and Adolescents' Access to Primary Care Practitioners —Ages 25 Months to 6 Years

Figure 6-2—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Children's and Adolescents' Access to Primary Care Practitioners—Ages 25 Months to 6 Years



None of the health plans met the HPL of 91.1 percent, while five health plans reported rates below the LPL of 77.8 percent. Two of the 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 78.2 percent was 6.5 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 84.7 percent.

The 2005 Michigan Medicaid weighted average was slightly higher than in 2004, up 0.2 of a percentage point. A gain of 2.3 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 75.9 percent.

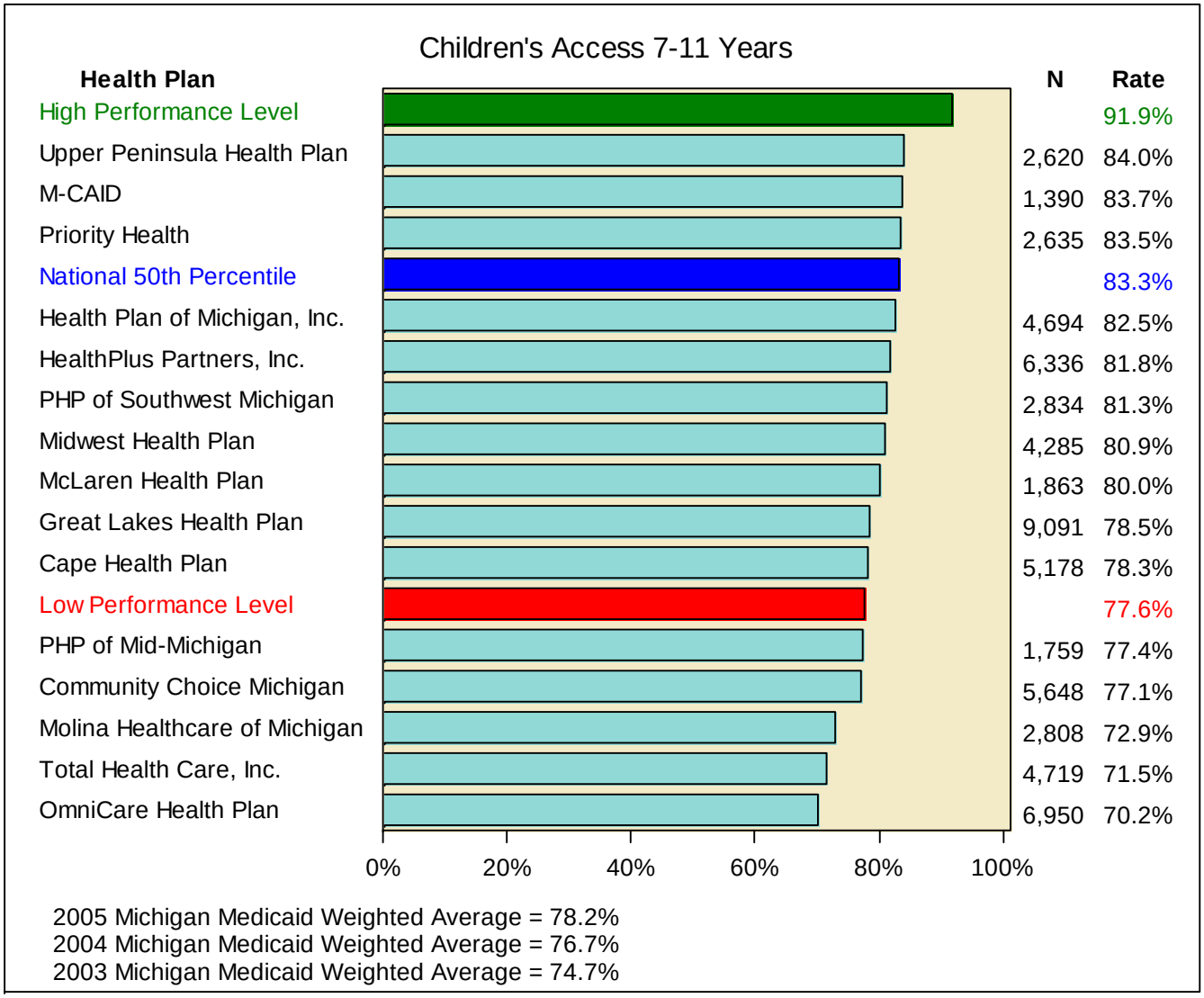
None of the health plans reported rates above the HPL in 2004, and five health plans had rates below the LPL. Overall, the range of reported rates declined in 2005 when compared to 2004.

HEDIS Specification: Children's and Adolescents' Access to Primary Care Practitioners —Ages 7 to 11 Years

Children's and Adolescents' Access to Primary Care Practitioners—Ages 7 to 11 Years reports the percentage of members aged 7 through 11 years who were continuously enrolled during the measurement year and the year prior to the measurement year, and who had a visit with an MHP primary care practitioner during the measurement year or the year prior to the measurement year.

Health Plan Ranking: Children's and Adolescents' Access to Primary Care Practitioners —Ages 7 to 11 Years

Figure 6-3—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Children's and Adolescents' Access to Primary Care Practitioners—Ages 7 to 11 Years



None of the health plans met the HPL of 91.9 percent, while five health plans reported rates below the LPL of 77.6 percent. Three of the 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile of 83.3 percent.

The 2005 Michigan Medicaid weighted average of 78.2 percent was 5.1 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 83.3 percent.

The 2005 Michigan Medicaid weighted average was higher than in 2004, up 1.5 percentage points. An increase of 3.5 percentage points was observed when compared to the 2003 Michigan Medicaid weighted average of 74.7 percent.

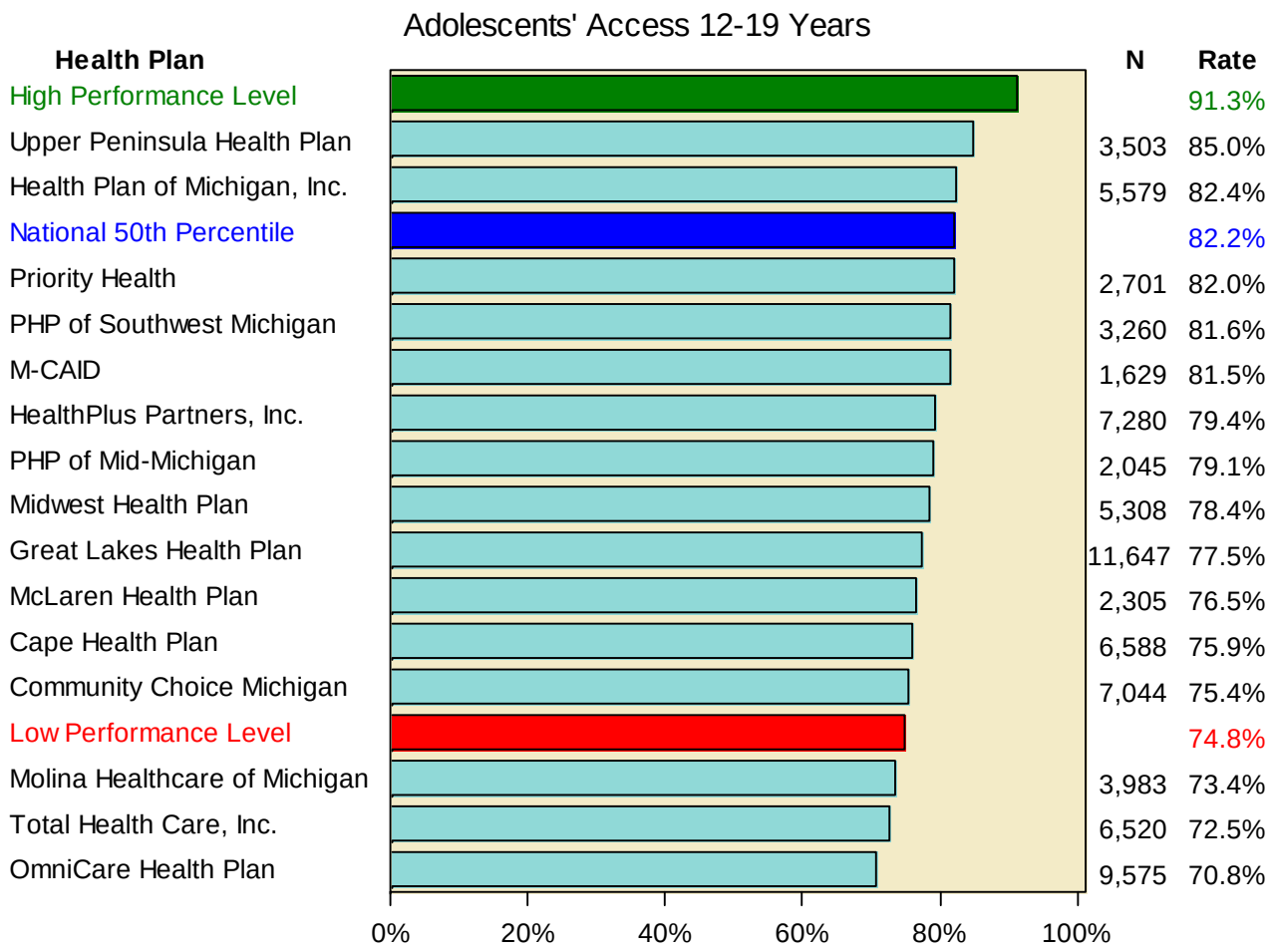
None of the health plans reached the HPL in 2004, while five health plans had rates below the LPL. Overall, the range of reported rates displayed no improvement from 2004 to 2005.

HEDIS Specification: Children's and Adolescents' Access to Primary Care Practitioners —Ages 12 to 19 Years

Children's and Adolescents' Access to Primary Care Practitioners—Ages 12 to 19 Years reports the percentage of members aged 12 through 19 years who were continuously enrolled during the measurement year and the year prior to the measurement year, and who had a visit with an MHP primary care practitioner during the measurement year or the year prior to the measurement year.

Health Plan Ranking: Children's and Adolescents' Access to Primary Care Practitioners —Ages 12 to 19 Years

Figure 6-4—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Children's and Adolescents' Access to Primary Care Practitioners—Ages 12 to 19 Years



None of the health plans met the HPL of 91.3 percent, while three health plans reported rates below the LPL of 74.8 percent. Two of the 15 health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 77.1 percent was 5.1 percentage points below the national HEDIS 2004 Medicaid 50th percentile of 82.2 percent. The 2005 Michigan Medicaid weighted average was greater than in 2004, up 2.4 percentage points.

Overall, the range of reported rates showed no improvement in 2005 when compared to 2004.

Adults' Access to Preventive/Ambulatory Health Services

The majority of adults have relatively frequent contact with their health care providers. According to the NCQA, 85 percent of Americans reported at least 1 visit with their health care provider within the last year and 13.5 percent reported 10 or more visits.[6-3]

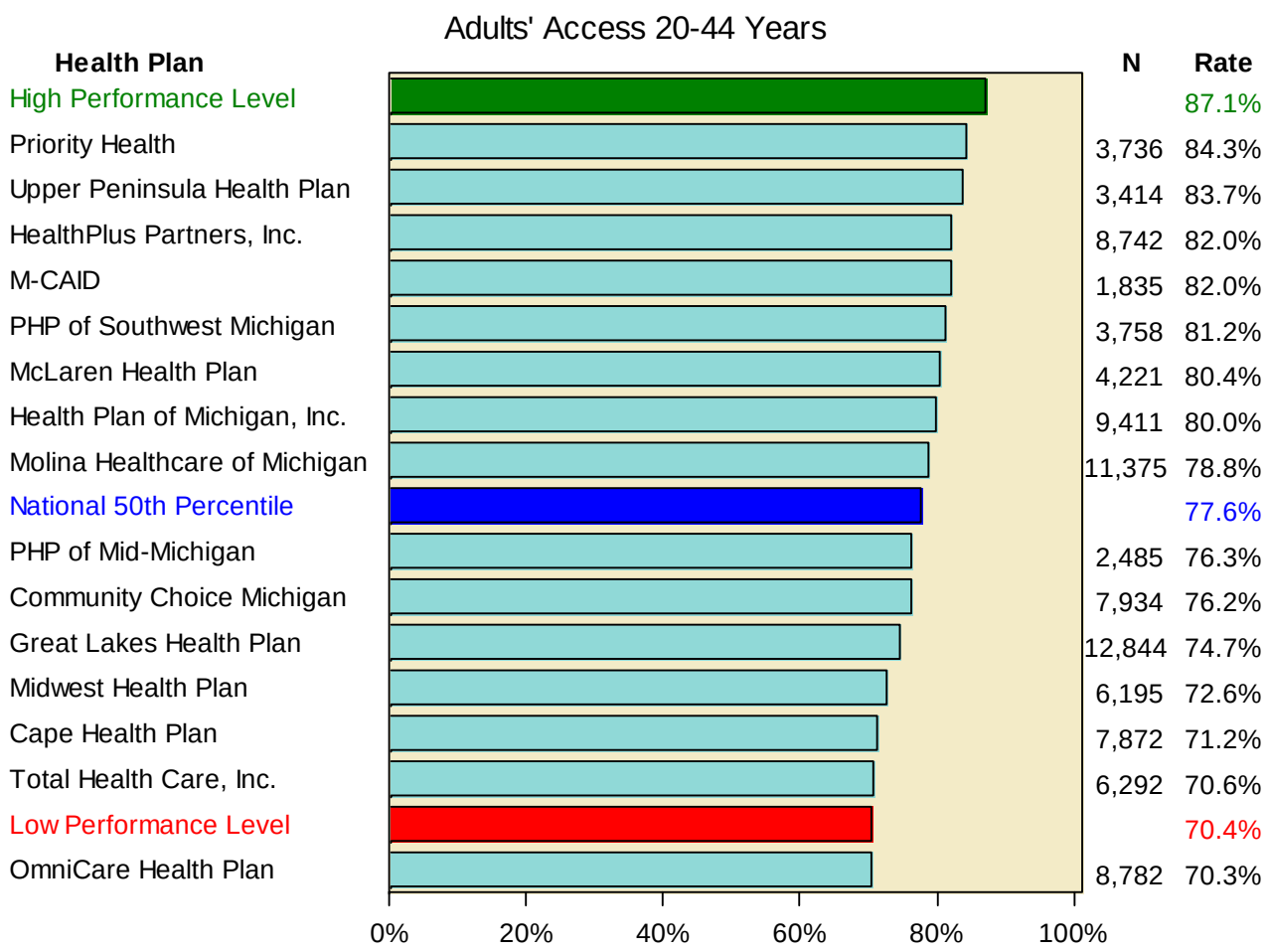
HEDIS Specification: Adults' Access to Preventive/Ambulatory Health Services —Ages 20 to 44 Years

The *Adults' Access to Preventive/Ambulatory Health Services—Ages 20 to 44 Years* measure calculates the percentage of adults aged 20 through 44 years who were continuously enrolled during the measurement year and who had an ambulatory or preventive care visit during the measurement year.

[6-3] National Committee for Quality Assurance. *The State of Managed Care Quality, 2001*. Available at: www.ncqa.org/somc2001/intro/somc_2001_industry.htm. Accessed on August 11, 2004.

Health Plan Ranking: Adults' Access to Preventive/Ambulatory Health Services —Ages 20 to 44 Years

Figure 6-5—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Adults' Access to Preventive/Ambulatory Health Services—Ages 20 to 44 Years



None of the health plans met the HPL of 87.1 percent, while one health plan had a rate below the LPL of 70.4 percent. A total of eight health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 76.7 percent was 0.9 of a percentage point below the national HEDIS 2004 Medicaid 50th percentile of 77.6 percent.

The 2005 Michigan Medicaid weighted average was slightly higher than in 2004, up 1.7 percentage points, and 2.6 percentage points above the 2003 Michigan Medicaid weighted average of 74.1 percent.

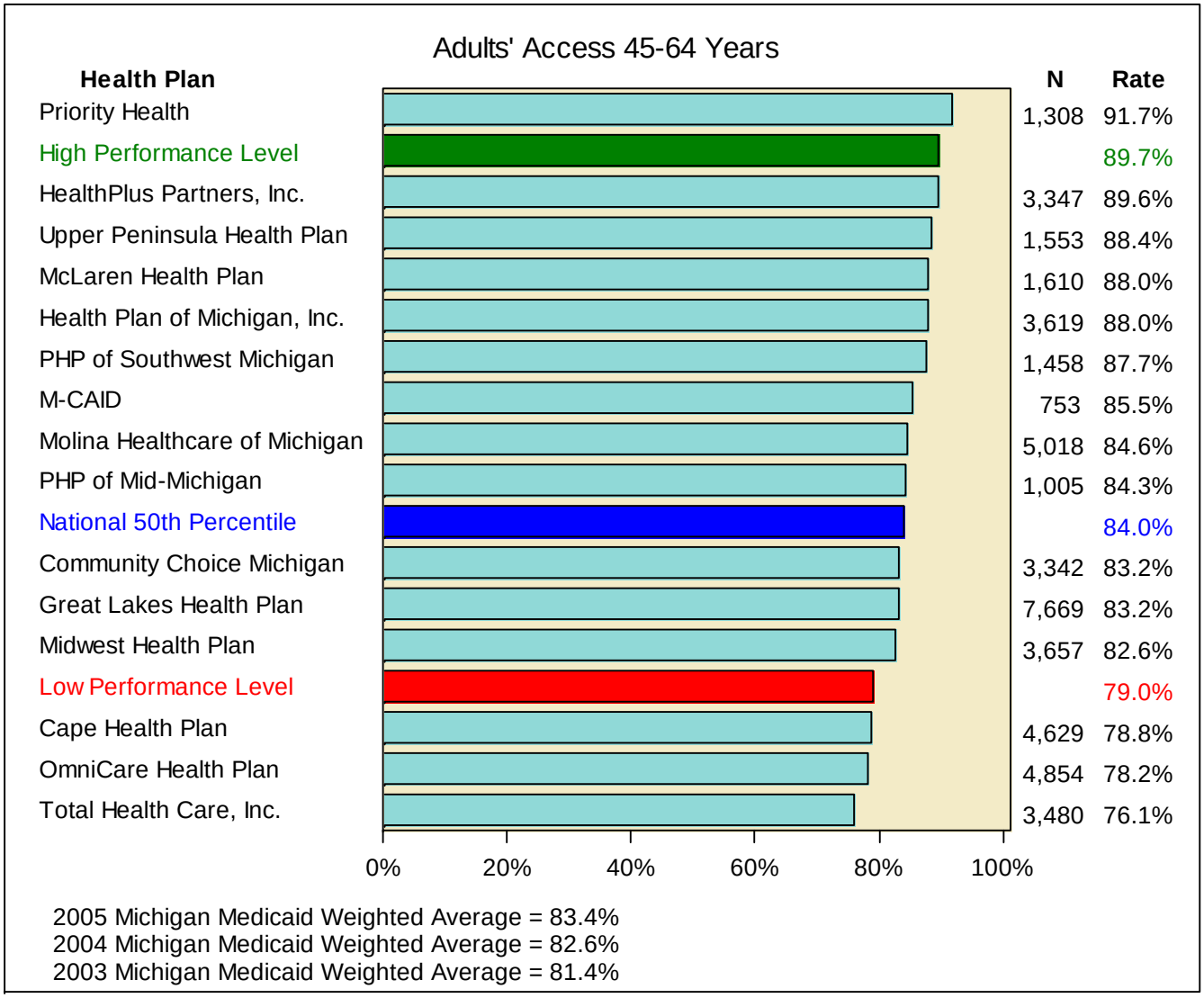
Reported rates ranged from 65.9 percent to 86.3 percent in 2004. In 2005, the reported rates ranges from 70.3 percent to 84.3 percent. Overall, no notable improvement was observed in the range of reported rates from 2004 to 2005.

HEDIS Specification: Adults' Access to Preventive/Ambulatory Health Services —Ages 45 to 64 Years

The *Adults' Access to Preventive/Ambulatory Health Services—Ages 45 to 64 Years* measure calculates the percentage of adults aged 45 through 64 years who were continuously enrolled during the measurement year and who had an ambulatory or preventive care visit during the measurement year.

Health Plan Ranking: Adults' Access to Preventive/Ambulatory Health Services —Ages 45 to 64 Years

Figure 6-6—Michigan Medicaid HEDIS 2005
Health Plan Ranking:
Adults' Access to Preventive/Ambulatory Health Services—Ages 45 to 64 Years



One health reported a rate above the HPL, while three health plans had rates below the LPL of 79.0 percent. A total of nine health plans reported rates above the national HEDIS 2004 Medicaid 50th percentile.

The 2005 Michigan Medicaid weighted average of 83.4 percent was slightly lower than the national HEDIS 2004 Medicaid 50th percentile of 84.0 percent. The reported range of rates ranged from a low of 76.1 to a high of 91.7 percent.

The 2005 Michigan Medicaid weighted average was 0.8 percent higher than in 2004, and 2.0 percentage points above the 2003 Michigan Medicaid weighted average.

In 2004, four health plans reported rates above the HPL, and three had rates below the LPL. Although one health plan reached the HPL in 2005, the range of reported rates improved slightly in 2005 compared to 2004.

Access-to-Care Findings and Recommendations

Improving access to care rates continues to be a challenge for the Michigan Medicaid managed care program. The Michigan weighted averages for all key measures in this dimension were below the Medicaid national 50th percentile, with only modest improvement noted over 2004 results. The range of rates also did not improve, indicating a static condition across the MHPs.

When comparing Michigan Medicaid performance to other dimensions of care, lower performance in the Access to Care key measures does not appear to be a data completeness issue. The use of the MCIR bolsters the immunization rates for children and adolescents. Well-child care rates were average, and no significant gain was noted from using the hybrid method. The only significant use of medical record data was for laboratory values; and, generally, administrative data across the MHPs appear complete. This suggests that the lower rates in the Access to Care dimension are not a product of incomplete data, but rather member and/or provider behavior patterns.

Access to care is one of the most complex challenges for Medicaid programs today. Quality initiatives and improvement efforts are traditionally targeted toward disease management, immunizations, prenatal care, and preventive screening. The key measures in the Access to Care dimension identify the rates of members who have at least one visit with a health plan provider. To improve Access to Care rates, health plans must reach members who have never accessed care in the provider office setting and who are sometimes referred to as “silent members.” Analysis of silent member utilization patterns for any type of care provided can present health plans with a place to start when attempting to improve rates. Surveys or member interviews can be useful tools in helping to identify reasons for not seeking care. Once barriers to care can be identified and categorized, targeted improvement efforts can be implemented.

7. HEDIS Reporting Capabilities

Key Findings

From the review of each health plan's Final Audit Reports and Data Submission Tools (DSTs), HSAG determined that, overall, the MHPs had no major process issues that impacted HEDIS reporting. None of the health plans had issues related to information systems capabilities that severely impacted the HEDIS results leading to a *Not Report*. However, two health plans were not able to perform a refresh of claims data after the initial load due to capacity issues by their vendor. The inability to refresh data administratively resulted in manual entry of data. The auditors performed review procedures of the estimated claims lag at the time of the initial warehouse build to demonstrate that the impact was not sufficient to exceed NCQA thresholds for significant bias.

Thirteen of the 15 MHPs used a certified source code vendor to produce the rates for the key measures they reported. For the other two MHPs, one developed its own source code and another used a combination of certified source code and internally developed code.

The HEDIS audits were performed by three NCQA-Licensed Audit Organizations. One of the organizations performed audits for 10 of the MHPs, another performed audits for 4 MHPs, and the third organization performed an audit for 1 MHP. With one firm performing the majority of the audits, there was consistency in the audit reports information. In general, the audit reports provided sufficient detail to enable HSAG to evaluate MHP IS capabilities.

Overall, the MHPs continued to improve with regard to any issues pertaining to previous HEDIS audit years. There were no issues identified related to data capture, as was the case in prior years for the key measures the MHPs were reporting. Each MHP was at least partially compliant with all of the IS standards; and, in fact, a majority were fully compliant. This generally resulted in more accurate and reliable performance measure information.

Conclusions and Recommendations

Over the past five years, Michigan MHP information system capabilities pertaining to accurate and valid HEDIS reporting have been steadily improving. Performing HEDIS data collection and reporting has been an invaluable experience for both the health plans and MDCH, as reflected by decreases in audit issues and overall increases in rates across the years. Since the Michigan MHPs have demonstrated the capability to report HEDIS data by having the necessary information systems and data collection processes in place, the primary focus should be on improvement of measure results, either through targeted interventions or pursuit of external administrative data that have not been previously available.

For upcoming HEDIS reporting years, MDCH should continue to focus on maintaining a relatively consistent set of required measures in order to utilize trending information advantageously. However, the approach could be balanced by adding one or two newer HEDIS measures to the key measures reporting set. Several new Effectiveness of Care measures released in 2005 are now stabilizing, and benchmark data will be available in the spring of 2006. MDCH should carefully

consider the data sources needed when adding new measures, as well as the additional burden on the MHPs. Wherever possible, administrative measures that are less labor-intensive and costly to produce should be considered. HSAG recommends that MDCH continue to consult with the health plans regarding the capability to collect the necessary data and determine collectively whether the measure adds value to the State's overall quality improvement strategy.