

# 2009 HEALTH CARE DISPARITIES REPORT *for Minnesota Health Care Programs*



**Comparing Medical Group Performance for Public and Private Purchasers Using Health Plan Data**



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Minnesota Department of **Human Services**

# 2009 HEALTH CARE DISPARITIES REPORT *for* Minnesota Health Care Programs

(For care delivered in 2008)

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# 2009 HEALTH CARE DISPARITIES REPORT

*for Minnesota Health Care Programs*

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## Executive Summary

The *2009 Health Care Disparities Report for Minnesota Health Care Programs* presents data at a statewide and medical group level that explores the degree to which health care best practices (recommended clinical performance targets) are achieved by physicians caring for patients enrolled in Minnesota Health Care Programs (MHCP). These programs, which are state-funded and administered by health plans, include Medical Assistance, MinnesotaCare and General Assistance Medical Care.

Compared with the overall population in Minnesota, patients enrolled in MHCP represent a population with lower socioeconomic status, as well as a disproportionate share of persons of color, American Indians, persons with disabilities, and elders. In addition to lower socioeconomic status, these patients often experience significant personal challenges that create barriers to receiving appropriate health care. In many cases, the structure of the health care system prevents them from receiving appropriate care. As a result, MHCP patients may not receive care that meets best practices as often as patients enrolled with Other Purchasers (commercial insurers or Medicare managed

care, excluding patients with dual eligibility for Medicare and Medicaid).

The ten measures in this report were selected by the Minnesota Department of Human Services (DHS) based on their relevance to patients enrolled in MHCP:

- Optimal Diabetes Care
- Controlling High Blood Pressure
- Use of Appropriate Medications for People with Asthma
- Appropriate Treatment for Children with Upper Respiratory Infection
- Appropriate Testing for Children with Pharyngitis
- Breast Cancer Screening
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Chlamydia Screening
- Childhood Immunization Status

Rates for these measures are reported at the statewide and medical group levels. The statewide results include patients enrolled in participating health plans. Medical groups are defined as one or more clinic sites where patients receive health care services.

### Key Findings

- For nine of the ten statewide measures, performance rates for MHCP patients have improved over multiple years. In other words, over time the rate at which physicians across the state are achieving best practices for MHCP patients has increased for nine of ten of the measures. Due to changes to the Chlamydia Screening measure, rates on that measure could not be compared.
- Compared to last year, improvements were noted for seven of the ten statewide measures. Statewide rates for Cervical Cancer Screening and Colorectal Cancer Screening were lower than the 2008 report. Chlamydia Screening could not be compared because of changes to the measure.
- This year, for eight of the ten measures at the statewide level, health care best practices were achieved significantly less often for patients enrolled in MHCP than for patients enrolled with Other Purchasers. One measure – Appropriate Treatment for Children with Upper Respiratory Infection – showed no difference between purchasers; one measure – Chlamydia Screening – showed a significantly higher performance rate for MHCP patients than for patients enrolled with Other Purchasers.

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## Executive Summary

- The largest gaps between MHCP and Other Purchasers occurred for the Colorectal Cancer Screening measure (a 29 percentage point difference) and the Breast Cancer Screening measure (a 16 percentage point difference).
- Statewide gaps in performance between MHCP and Other Purchasers have narrowed for seven measures over time:
  - Use of Appropriate Medications for People with Asthma (over 6 years)
  - Appropriate Treatment for Children with URI (over 4 years)
  - Appropriate Testing for Children with Pharyngitis (over 4 years)
  - Breast Cancer Screening (over 6 years)
  - Cervical Cancer Screening (over 6 years)
  - Colorectal Cancer Screening (over 4 years)
  - Childhood Immunization Status (over 4 years)
- Statewide gaps in performance between MHCP and Other Purchasers have widened for two measures over time:
  - Optimal Diabetes Care (over 6 years)
  - Controlling High Blood Pressure (over 3 years)
- At the medical group level, performance rate differences between MHCP and Other Purchasers were found for each measure. For some medical groups, the differences were statistically significant. Even when medical groups achieve a higher than average performance rate with their MHCP patients, they can have performance rate gaps between MHCP patients and patients enrolled with Other Purchasers. In other words, some medical groups are achieving health care best practices for their MHCP patients at a rate higher than average, but there is still a gap between how often they are achieving those best practices for their MHCP patients and how often they are achieving best practices for their patients enrolled with Other Purchasers.
- For five measures, some medical groups had performance rate gaps between purchasers of less than 1 percentage point, indicating little or no difference between purchasers. These measures include: Use of Appropriate Medications for People with Asthma, Appropriate Treatment for Children with Upper Respiratory Infection, Appropriate Testing for Children with Pharyngitis, Cervical Cancer Screening, and Chlamydia Screening.
- Differences exist between racial groups within the MHCP patient population for nine of ten measures. There is essentially no difference by race for the asthma measure.
  - Optimal Diabetes Care – Asian patients had the highest rate of achieving the health care best practices and it is the only racial group that is significantly higher than the MHCP statewide rate. The American Indian group had the lowest rate and it was significantly lower than any other racial group. There were two racial groups with performance rates significantly lower than the statewide MHCP rate – American Indian and Black/African American.
  - Controlling High Blood Pressure – American Indian patients had a significantly lower rate than the statewide MHCP rate.

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## Executive Summary

- Appropriate Treatment for Children with Upper Respiratory Infection – Black/African American patients had the highest rate; White patients had the lowest rate.
- Appropriate Testing for Children with Pharyngitis - Black/African American patients had the highest rate; Asian patients had the lowest rate.
- Breast Cancer Screening – White patients had a significantly higher rate than all other racial groups and it is the only racial group with a significantly higher rate than the statewide MHCP rate.
- Cervical Cancer Screening – Black/African American patients had the highest rate; American Indian and Asian patients had the lowest rates.
- Colorectal Cancer Screening – American Indian patients had the highest rate and it is the only racial group that had a significantly higher rate than the statewide MHCP rate; Asian patients had the lowest rate and it is the only racial group with a rate that is significantly lower than the MHCP rate.
- Chlamydia Screening - American Indian and Black/African American patients had the highest rates; White patients had the lowest rate.
- Childhood Immunization Status – American Indian patient had the lowest rate and it is the only racial group with a performance rate that is significantly lower than the MHCP statewide rate.

The Minnesota Department of Human Services and MN Community Measurement are committed to continuing our partnership to publicly report this information in an effort to accelerate improvements in health for all patients in Minnesota. To accomplish this, future Health Care Disparities Reports will include measures that use data submitted directly by medical groups and validated by MNMCM. This will allow us to report on more clinic sites and the experiences of more MHCP patients.

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## Introduction

The *2009 Health Care Disparities Report for Minnesota Health Care Programs* (reporting on health care delivered in 2008) is the third such report produced by MN Community Measurement in collaboration with the Minnesota Department of Human Services. We present data exploring the degree to which health care best practices (recommended clinical performance targets) are achieved by physicians who provide health care at a medical group for patients enrolled in Minnesota Health Care Programs (MHCP). Medical groups are defined as one or more clinic sites where patients receive health care services. MHCP includes Medical Assistance, MinnesotaCare and General Assistance Medical Care. These state-funded programs are administered by health plans and therefore do not include Medicaid Fee-For-Service patients. The patients enrolled in MHCP represent a population with lower socioeconomic status, as well as a disproportionate share of persons of color, American Indians, persons with disabilities, and elders, compared with the overall population in Minnesota.

The first *Health Care Disparities Report* (published in 2007 and reporting on care delivered in 2006), was a “first in the nation” effort that highlighted differences (both statewide and at a medical group level) in the degree to which best practices were achieved for MHCP patients and patients enrolled with Other Purchasers. Other Purchasers were defined as Medicare managed care and employer-sponsored health care insurance. Medicare Fee-For-Service patients were not included in the other purchasers category. It heightened awareness and made transparent the differences between purchasers that exist even within the same medical group.

The second annual report not only examined differences in performance rates between purchasers within a medical group, but also examined whether those differences were more pronounced for some medical groups than others. Results showed that there were some medical groups with a significantly wider gap between purchasers than the overall gap between purchasers at the statewide level. Currently, these are the only public reports that identify these differences and compare medical groups against their peers. Medical groups, health plans, DHS and others have begun to use these results to tailor their strategies to improve quality for these patient populations.

In this third Health Care Disparities Report, we examine the progress that has been made over the last three years. It now includes ten measures selected by DHS based on their relevance to patients enrolled in MHCP. Most measures have been developed by the National Committee for Quality Assurance (NCQA) as Health Effectiveness Data Information Set (HEDIS) measures. HEDIS is a national set of standardized performance measures originally designed for the managed care industry and adapted by MN Community Measurement to track the performance of medical groups. The measures have been endorsed by the National Quality Forum (NQF) and are aligned with clinical guidelines established by Minnesota’s own Institute for Clinical Systems Improvement (ICSI).

As with previous reports, the data originate from health plan administrative claims databases and are supplemented by medical record review for measures that require clinical data. Measures that are wholly derived from health plan claims data are referred to as administrative measures. Medical groups are publicly reported if at least 30 patients meet the measure specifications.

Measures that require clinical data are referred to as hybrid measures because the health plans first use claims data to identify eligible patients and then use chart review to obtain clinical data

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## Introduction

on a random sample of patients. Because of the cost and burden of chart review on medical groups and health plans, sampling is used to appropriately estimate rates for these measures. Sampling requires that results for hybrid measures are adjusted (weighted) to reflect the larger eligible population from which the sample was drawn. Medical groups are publicly reported if at least 60 patients meet the measure specifications. For more information on methods see Appendix 2.

Health plans collect the data elements for these measures using data collection and reporting standards that follow national HEDIS requirements. The eligible populations for the administrative and hybrid measures are identified by each participating health plan utilizing its respective administrative databases. NCQA's 2009 HEDIS Technical Specifications provide the standard definitions for the eligible population, which include data elements such as age and enrollment criteria in order for patients to be included in each measure. MNCM aggregates the data from all participating health plans and publicly reports the results.

Measures are summarized in categories based on health care emphasis. Some measures assess how well providers care for patients with chronic health care conditions and are referred to as "Living with Illness" measures. Another category includes measures that reflect how well providers care for patients with common acute illnesses and are referred to as "Getting Better" measures. A third category includes measures that reflect how well providers keep individuals healthy and identify disease at an early stage, when it can be treated most effectively. These measures are referred to as "Staying Healthy" measures. Detailed measure definitions can be found in Appendix 7.

Results at a Glance provides a quick overview of current statewide results compared to previous years. It also includes a comparison of the gaps between purchasers for this year and over time. Information about rates for each of the ten measures is reported. Each measure is described and statewide results by purchaser are displayed, including trending results for MHCP and Other Purchasers. We provide medical group performance highlights for MHCP patients including a list of medical groups who have high performance and those medical groups with the biggest improvements. The report also highlights medical groups that have been the most and least successful at achieving health care best practices for the MHCP population and summarizes medical group performance over time. Detailed information about medical group performance can be found in the appendices.

For the first time, we report MHCP performance rates by race at the statewide level using data that the Minnesota Department of Human Services shares with the health plans that serve MHCP patients. Rates are calculated for and comparisons made between racial groups. Results show the differences in MHCP performance rates between racial groups.

Data in this report show that for some measures the performance rate gap between MHCP and Other Purchasers has narrowed, but for other measures it is widening. These results are an indication that more must be done to reduce barriers that limit medical groups' ability to achieve performance targets and patients' ability to obtain the care they need. We should learn from the medical groups that have achieved high performance rates for their MHCP patients and/or have narrowed the performance gap between purchasers. This will require a renewed focus on patient-centered care and support for the concept of health care homes being championed in Minnesota and the nation.

## Results at a Glance

### MHCP Statewide Rate Comparisons to Previous Years

Table 1 displays the MHCP statewide results for report year 2009 and compares these results to previous years. The measures with the highest MHCP rates were Use of Appropriate Medications for People with Asthma (87.6%) and Appropriate Treatment for Children with URI (87.1%). The measure with the lowest MHCP rate was Optimal Diabetes Care (9.9%).

Three of the ten statewide measures showed statistically significant improvements from report year 2008. Optimal Diabetes Care had the largest gain (2 percentage points). Most of the measures showed a slight but not significant gain, while 2 measures – Colorectal Cancer Screening and Cervical Cancer Screening – showed statistically significant declines from report year 2008 to 2009. One measure – Chlamydia Screening – could not be compared to previous years because specifications changed in 2009.

Measures that have been reported for six years showed large improvements over that time period. Cervical Cancer Screening had the largest gain (30 percentage points) followed by Breast Cancer Screening (28 percentage points) and Use of Appropriate Medications for People with Asthma (20 percentage points). Measures that have been reported for four years also showed improvements. Of those, Childhood Immunizations had the largest gain (26 percentage points) followed by Colorectal Cancer Screening (16 percentage points). All changes except those for Controlling High Blood Pressure and Appropriate Treatment for Children with URI were statistically significant over time. Fortunately, the two measures that showed declines from report year 2008 both showed substantial improvement over the longer time period. It will be important to monitor performance on these measures in the future to ensure that the long-term improvement is maintained.

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## Results at a Glance

Table 1: Summary of MHCP Statewide Rates for 2009 Report Year Compared with Previous Years\*

Quality Measure	2009 MHCP Statewide Average	MHCP Percentage Point Change Statewide (Report Year 2009-2008)	MHCP Percentage Point Change Over Time (Report Year 2009-First Year Reported)
<b>“Living with Illness” measures</b>			
Optimal Diabetes Care*	9.9%	2.1%** ↑	8.0%**↑ (6 years)
Controlling High Blood Pressure*	63.6%	1.4% ↑	2.3%↑ (3 years)
Use of Appropriate Medications for People with Asthma (Ages 5-56)	87.6%	0.6% ↑	20.4%**↑ (6 years)
<b>“Getting Better” measures</b>			
Appropriate Treatment for Children with URI	87.1%	1.8%** ↑	0.7%↑ (4 years)
Appropriate Testing for Children with Pharyngitis	80.7%	1.8%** ↑	9.1%**↑ (4 years)
<b>“Staying Healthy” measures</b>			
Breast Cancer Screening	61.9%	1.8% ↑	28.4%**↑ (6 years)
Cervical Cancer Screening	71.0%	-2.2%** ↓	30.3%**↑ (6 years)
Colorectal Cancer*	39.2%	-3.3%** ↓	16.4%**↑ (4 years)
Chlamydia Screening (Ages 16-25)	56.1%	N/A	N/A
Childhood Immunizations Status*	74.7%	2.7% ↑	25.5%**↑ (4 years)

\* These statewide averages are weighted samples (see methods). \*\* Statistically significant difference ( $p < 0.05$ ).  
NA = Not applicable. The measurement specifications change so comparisons can't be made to previous years.

### Summary of Statewide Rate Gaps

Table 2 displays data at the statewide level showing differences in the achievement of health care best practices for patients enrolled in MHCP versus patients enrolled with Other Purchasers. Rate gaps were calculated by subtracting the MHCP rate from the Other Purchasers rate. In the table, a positive difference means that the Other Purchasers rate was higher than the MHCP rate, and a negative difference means that the MHCP rate was higher than the Other Purchasers rate.

For nine of the ten measures, the statewide rate for Other Purchasers was higher than the statewide rate for MHCP. This means that physicians successfully achieved health care best practices in treating patients of Other Purchasers more often than they did in treating MHCP patients. Colorectal Cancer Screening had the widest gap between MHCP patients and patients enrolled with Other Purchaser (28 percentage points) and Breast Cancer Screening had the second widest gap (16 percentage points). Chlamydia Screening had the third widest gap between MHCP patients and patients enrolled with Other Purchasers, but in this case, the statewide MHCP rate was higher than the rate for Other Purchasers (11 percentage points).

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## Results at a Glance

For seven of the ten measures, the statewide gap (Other Purchasers - MHCP) has narrowed over time, but this narrowing was statistically significant only for Cervical Cancer Screening. For two measures – Optimal Diabetes Care and Controlling High Blood Pressure – the statewide gap (Other Purchasers - MHCP) widened over time but this was only statistically significant for Optimal Diabetes Care.

**Table 2: Summary of Statewide Rate Gaps**

Quality Measure	MHCP Statewide Average (2009)	Other Purchasers Statewide Average (2009)	Rate Difference (2009) (Other Purchasers - MHCP)	Rate Difference (Current Year vs. First Year) Over time (Other Purchasers - MHCP)
<b>“Living with Illness” measures</b>				
Optimal Diabetes Care*	9.9%	16.8%	6.9%**	Gap Widened** (2004-2009)
Controlling High Blood Pressure*	63.6%	69.9%	6.3%**	Gap Widened (2007-2009)
Use of Appropriate Medications for People with Asthma (Ages 5-56)	87.6%	92.8%	5.2%**	Gap Narrowed (2004-2009)
<b>“Getting Better” measures</b>				
Appropriate Treatment for Children with URI	87.1%	87.0%	0.1%	Gap Narrowed (2006-2009)
Appropriate Testing for Children with Pharyngitis	80.7%	88.2%	7.5%**	Gap Narrowed (2006-2009)
<b>“Staying Healthy” measures</b>				
Breast Cancer Screening	61.9%	77.9%	16.0%**	Gap Narrowed (2004-2009)
Cervical Cancer Screening	71.0%	76.8%	5.8%**	Gap Narrowed** (2004-2009)
Colorectal Cancer	39.2%	68.0%	28.8%**	Gap Narrowed (2006-2009)
Chlamydia Screening (Ages 16-25)	56.1%	44.8%	-11.3%**	N/A
Childhood Immunizations Status*	74.7%	79.7%	5.0%**	Gap Narrowed (2006-2009)

\*These statewide averages are weighted samples (see methods). \*\* Statistically significant at  $p < 0.05$ .

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## Results at a Glance

### **Analysis of Medical Group Purchaser Rate Gaps**

For each measure, statistical analyses were conducted to assess whether gaps between purchasers were present within a medical group, and whether purchaser rate gaps at the medical group level were bigger or smaller than the statewide purchaser rate gap. A detailed table of medical group purchaser rate gaps and a summary of findings for each of the measures can be found in Appendix 5.

### **Impact of Continuous Enrollment Criteria on MHCP Performance Rates**

Continuous enrollment specifies the minimum amount of time that a person must be enrolled in a health plan before they are eligible for a measure. When used as part of a measurement tool, continuous enrollment defines a sufficient timeframe during which a health care service could be performed. Unfortunately, MHCP patients may have multiple interruptions in enrollment due to events such as the loss of MHCP eligibility. Therefore, MHCP patients included in this report are those with continuous enrollment and may not reflect the experience of all MHCP patients.

## Results by Measure

2009 Report (2008 Dates of Service)

This section presents rates for each of the ten measures selected by DHS for this report. Each measure is briefly described and then statewide results by purchaser are displayed, including trending results for MHCP and Other Purchasers. Next, we provide medical group performance highlights for MHCP patients including a list of medical groups who have high performance and those medical groups with the biggest improvements. We also provide medical group performance over time and an analysis of medical group purchaser rate gaps.

Detailed medical group level data is presented in three appendices:

- Appendix 3: Medical Group Performance Rate Tables
- Appendix 4: Medical Group Performance Over Time (3-years)
- Appendix 5: Purchaser Performance Rate Differences

# “Living with Illness” measures

## Optimal Diabetes Care

This measures the percentage of patients with diabetes (Type 1 or Type 2) ages 18-75 who reached all of the following five treatment goals to reduce the risk of cardiovascular diseases:

- Blood pressure less than 130/80 mmHg
- LDL-C less than 100 mg/dl
- Hemoglobin A1c less than 7
- Documented tobacco-free status
- Daily aspirin use (ages 41-75 on aspirin therapy unless contraindicated)

Data collected for this measure are from health plan claims and medical record review.

MHCP patients had a significantly lower Optimal Diabetes Care rate than patients enrolled with Other Purchasers ( $p < 0.05$ ). The statewide MHCP rate for Optimal Diabetes Care was 10 percent and the rate for Other Purchasers was 17 percent. This means that, statewide, only 10 percent of patients enrolled in MHCP reached all five treatment goals while 17 percent of patients enrolled with Other Purchasers did so. Table 3.1 displays these statewide rates.

**Table 3.1: Statewide Weighted Rates\* for Optimal Diabetes Care**

Purchasers	Statewide Weighted Rate*	95% CI	Denominator (Patients sampled)
MHCP	9.9%	9.1% - 10.7%	5,788
Other Purchasers	16.8%	15.7% - 18.0%	4,131

\* The statewide weighted rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 3.1 displays the statewide rates over time. The rates for patients of both purchasers have improved every year since 2004, but gaps between the rates for patients of MHCP and patient of Other Purchasers have been present every year since 2004.

**Figure 3.1: Optimal Diabetes Care Statewide Rates over Time**

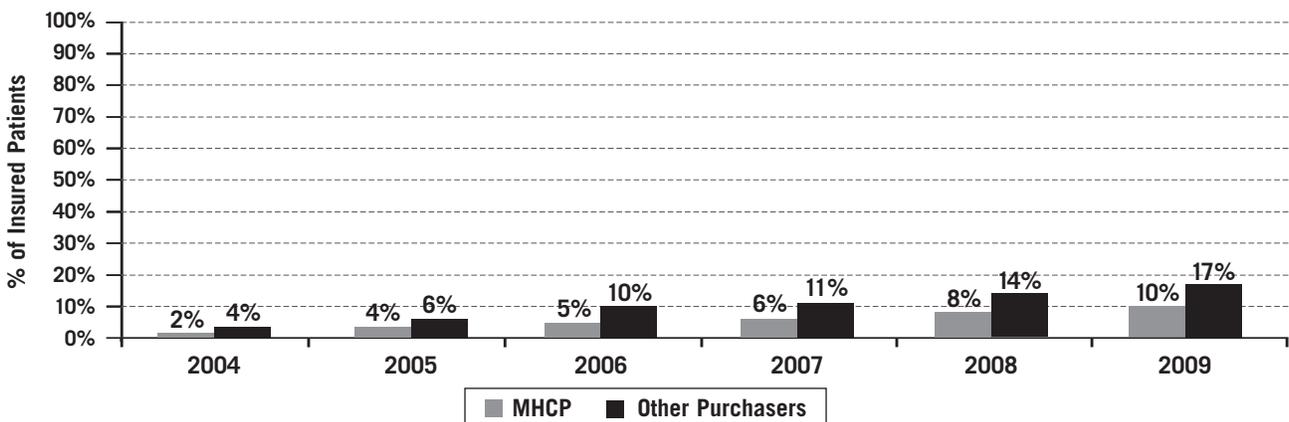
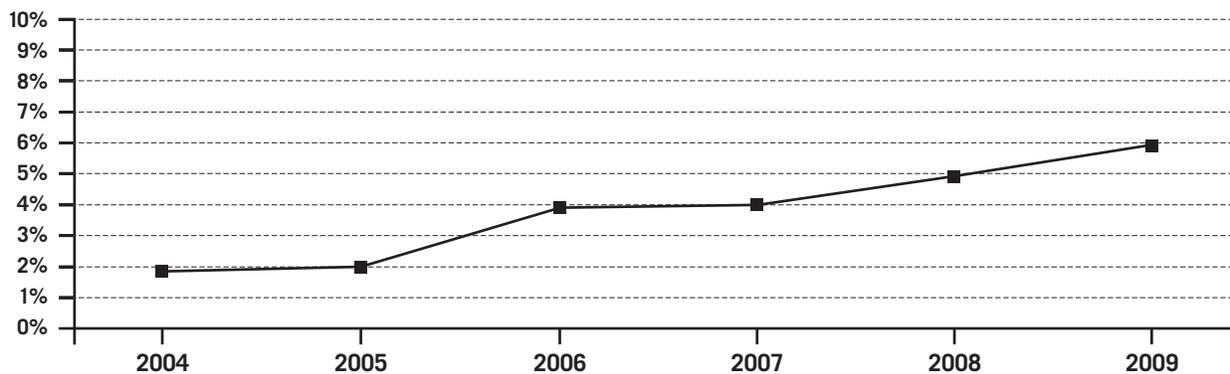


Figure 3.2 focuses on the gaps between purchasers over time. For the Optimal Diabetes Care measure, the gap between purchasers has slowly widened since 2004 and this change is statistically significant ( $p_{\text{trend}} = 0.0023$ ).

**Figure 3.2 Optimal Diabetes Care: Statewide Gaps between Patients of Other Purchasers and MHCP Patients by Year (Other Purchasers - MHCP)**

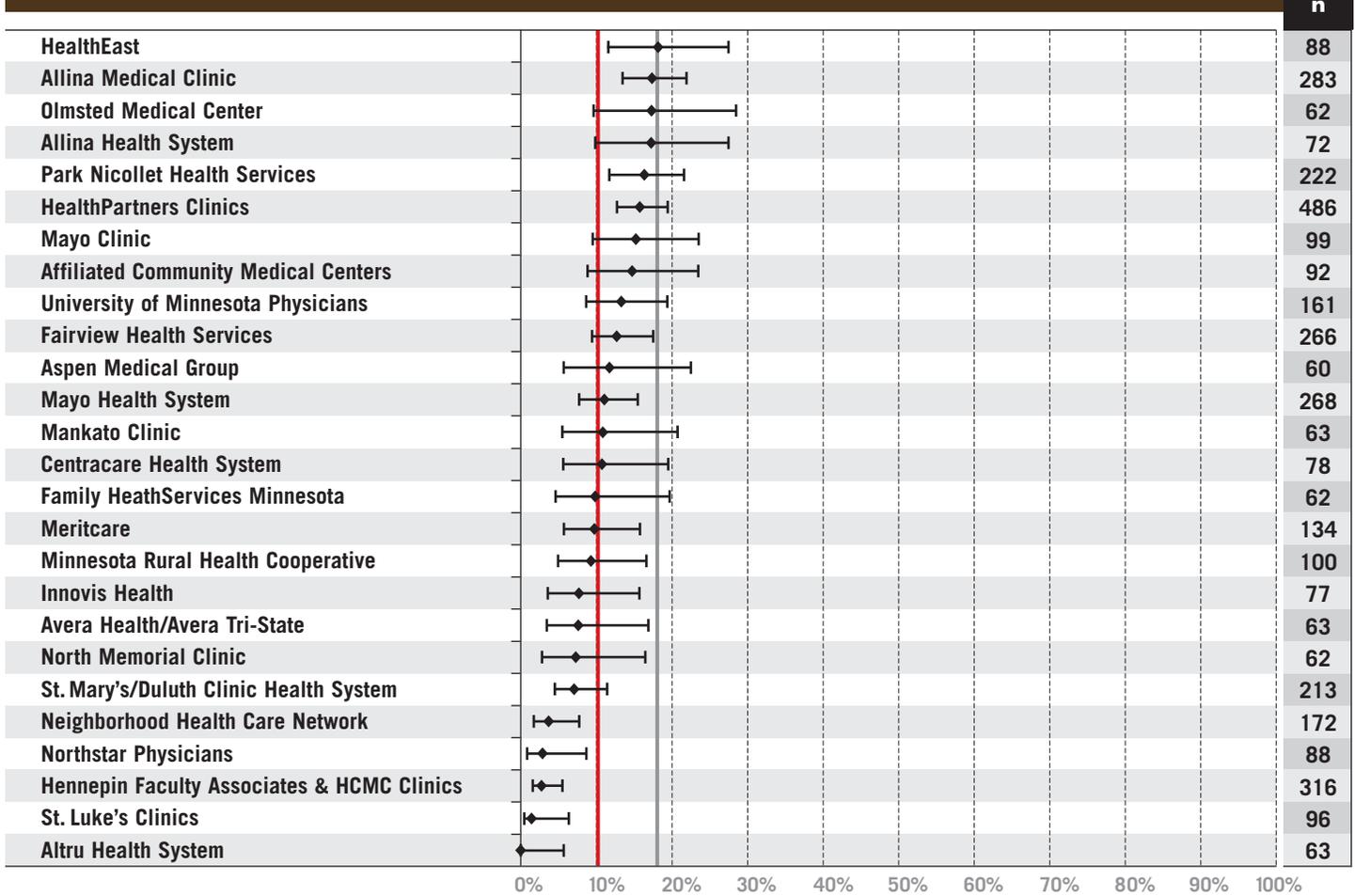


## Medical Group Performance Highlights

Chart 3 provides the Optimal Diabetes Care MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 26 medical groups had at least 60 patients in their sample – a large enough sample to ensure a reasonable level of confidence in the reported rate. These 26 medical groups account for 3,746 of the 5,788 MHCP patients (65 percent) who were eligible for this measure statewide. The 26 medical groups account for 50 percent of medical groups reportable for this measure through MNCM's 2009 *Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving health care best practices with their patients enrolled in MHCP. The most successful medical group, **HealthEast**, achieved these best practices with 18 percent of their MHCP patients, while **Altru Health System** was unable to achieve all five best practice elements with any of their MHCP patients. Performance variation is not unique to MHCP and provides evidence that there is room for improvement. A detailed table of medical group rates can be found in Appendix 3.

**Chart 3: Optimal Diabetes Care Rates by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in sample)



MHCP Medical Group Average\* **10%**  
Other Purchasers Medical Group Average\* **18%**

Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

HealthEast had the highest Optimal Diabetes Care rate for MHCP diabetes patients at 18 percent. Four medical groups had rates and confidence intervals that were fully above the medical group average of 10 percent for patients enrolled in MHCP:

- HealthEast
- Allina Medical Clinic
- Park Nicollet
- HealthPartners Clinics

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Optimal Diabetes Care was made by HealthEast achieving a 12 percentage point increase for their MHCP patients.

### Medical Group Performance Over Time (2007-2009)

We reviewed the data to identify patterns by medical group for the twenty one medical groups that have three years of data beginning in 2007 when the first *Health Care Disparities Report* was issued. We looked for patterns of consistent improvement, consistent decreases, and relative stability. The results are summarized below and a detailed table of medical group performance over time can be found in Appendix 4.

Six groups showed consistent improvement:

- Olmsted Medical Center
- Mayo Clinic
- Aspen Medical Group
- CentraCare Health System
- Park Nicollet Health Services
- HealthPartners Clinics

No medical groups showed consistent decreases.

Two groups had rates that were relatively stable:

- St. Luke's Clinics
- Northstar Physicians

Eleven medical groups did not have a discernable pattern.

## Review of Optimal Diabetes Care Components at a Statewide Level

This 2009 *Health Care Disparities Report* also presents information on the five individual components of the Optimal Diabetes Care measure:

- Blood pressure less than 130/80 mmHg
- LDL-C less than 100 mg/dl
- Hemoglobin A1c less than 7
- Documented tobacco-free status
- Daily aspirin use (ages 41-75 on aspirin therapy unless contraindicated)

Two questions were addressed:

- 1) Are there differences in the degree to which physicians are successful in applying health care best practices for each component of the Optimal Diabetes Care measure for their patients enrolled in MHCP versus their patients enrolled with Other Purchasers; do some components have larger differences than others?
- 2) Overall, do physicians practicing at medical groups have less success in applying best practices with some components than others?

Table 3.2 presents the percentages of patients who received optimal care for each component. Regardless of purchaser, there are three components of the Optimal Diabetes Care measure for which physicians at medical groups were noticeably less successful in applying health care best practices – Blood Pressure, LDL and A1c. These components have had the lowest performance rates within the Optimal Diabetes Care composite measure since report year 2007.

There are statistically significant differences between patients of MHCP and patients of Other Purchasers for all components ( $p < 0.05$ ). Like the Optimal Diabetes Care composite measure, physicians were not as successful in achieving health care best practices with their MHCP patients as they were with patients enrolled with Other Purchasers for each of the five components. Table 3.2 displays these results for report year 2009. Two components – Tobacco Free Status and LDL – emerged with larger differences between purchasers than the other three components. As shown in Table 3.3, which displays the results over time, these two components have maintained the largest differences since report year 2007.

**Table 3.2: 2009 Statewide Rates – Five Components of Optimal Diabetes Care measure comparing MHCP Patients to Patients enrolled with Other Purchasers**

Five Components of Optimal Diabetes Care Measure	MHCP Rate	Other Payers Rate	Rate Difference (Other Purchasers - MHCP)
1. BP < 130/80 mmHg	49.4%	52.8%	3.4%
2. LDL < 100 mg/dl	44.2%	56.0%	11.8%
3. A1c < 7	46.3%	50.3%	4.0%
4. Tobacco Free Status	63.6%	79.5%	15.9%
5. Daily Aspirin Use	74.2%	83.8%	9.7%
<b>Optimal Diabetes Care composite</b>	<b>9.9%</b>	<b>16.8%</b>	

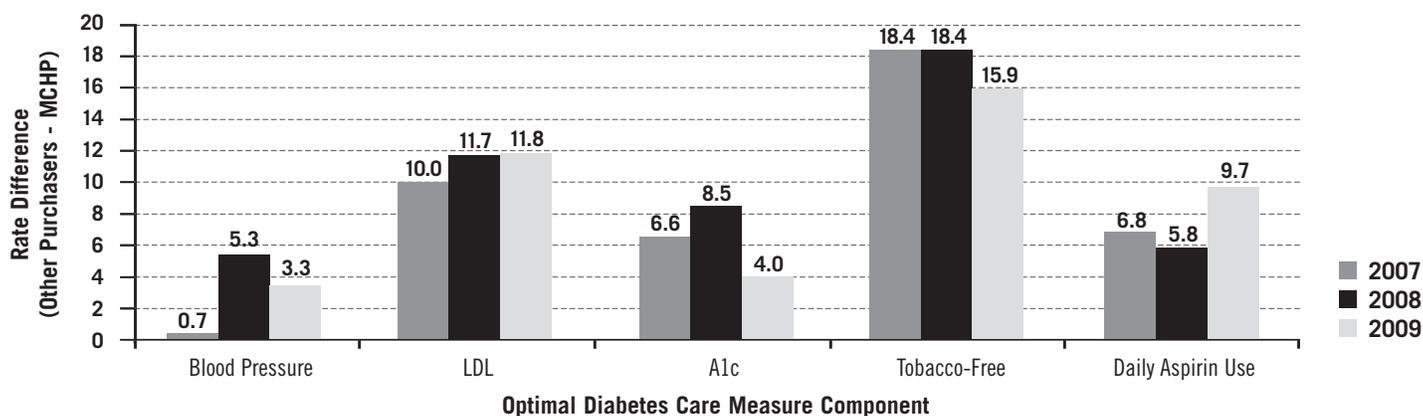
Table 3.3 displays the rates for purchasers over the three years that the *Health Care Disparities Report* has been published. The gaps between purchasers have been present for each of the components since report year 2007. For two components – A1c and Tobacco Free Status – the gaps have narrowed over time. For the remaining three components, the gaps have widened over time.

**Table 3.3: 2007-2009 Statewide Rates – Five Components of Optimal Diabetes Care measure comparing Gaps over time between MHCP Patients and Patients enrolled with Other Purchasers**

Optimal Diabetes Care Component	Year	Minnesota Health Care Programs (MHCP)	Other Purchasers	Rate Difference (Other Purchasers - MHCP)
Blood Pressure <130/80 mmHg	2007	45.2%	45.9%	0.7%
	2008	43.3%	48.6%	5.3%
	2009	49.5%	52.8%	3.3%
LDL <100 mg/dl	2007	39.9%	49.9%	10.0%
	2008	40.1%	51.8%	11.7%
	2009	44.2%	56.0%	11.8%
A1c <7	2007	42.8%	49.4%	6.6%
	2008	40.4%	48.9%	8.5%
	2009	46.3%	50.3%	4.0%
Tobacco Free Status	2007	57.1%	75.5%	18.4%
	2008	59.2%	77.6%	18.4%
	2009	63.6%	79.5%	15.9%
Daily Aspirin Use	2007	70.8%	77.6%	6.8%
	2008	74.1%	79.9%	5.8%
	2009	74.2%	83.8%	9.7%

Figure 3.3 graphically depicts the gaps between purchasers for the five components over time. It visually displays that gaps have been present since report year 2007.

**Figure 3.3: 2007-2009 Gaps between MHCP Patients and Patients enrolled with Other Purchasers for the Five Components of Optimal Diabetes Care**



The nature of the all-or-none Optimal Diabetes Care composite measure means that it is possible for a medical group to have higher performance rates on individual components of Optimal Diabetes Care while the performance rate on the composite Optimal Diabetes Care measure is quite low. This is because an individual patient must have met the requirements for all five components in order to be defined as optimally managed. If medical groups focus improvement efforts on an individual component solely, they may not improve their overall Optimal Diabetes Care composite measure. It is critical to address all five components for all patients.

# “Living with Illness” measures

## Controlling High Blood Pressure

This measures the percentage of patients between ages 18-85 with a diagnosis of hypertension, also known as high blood pressure, whose blood pressure was adequately controlled at less than 140/90 mmHg during the measurement year. The representative blood pressure, as defined by NCQA, is the most recent blood pressure reading during the measurement year (as long as the reading occurred after the diagnosis of hypertension was made). Data collected for this measure are from health plan claims and medical record review.

The health care best practice of Controlling High Blood Pressure was achieved with MHCP patients at a significantly lower rate than with patients enrolled with Other Purchasers ( $p < 0.05$ ). The statewide rate for Controlling High Blood Pressure for MHCP patients was 64 percent; the rate for patients enrolled with Other Purchasers was 70 percent. Table 4 displays these statewide rates.

**Table 4: Statewide Weighted Rates\* for Controlling High Blood Pressure**

Purchasers	Statewide Weighted Rate*	95% CI	Denominator (Patients sampled)
MHCP	63.6%	62.4% - 64.7%	6,684
Other Purchasers	69.9%	68.5% - 71.2%	4,354

\* The statewide weighted rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 4.1 displays the statewide rates over time. The rates at which this health care best practice was successfully achieved with patients of both purchasers have improved since 2007. However, gaps between purchasers have been present every year since 2007 and continue to persist.

**Figure 4.1: Controlling High Blood Pressure Statewide Rates over Time**

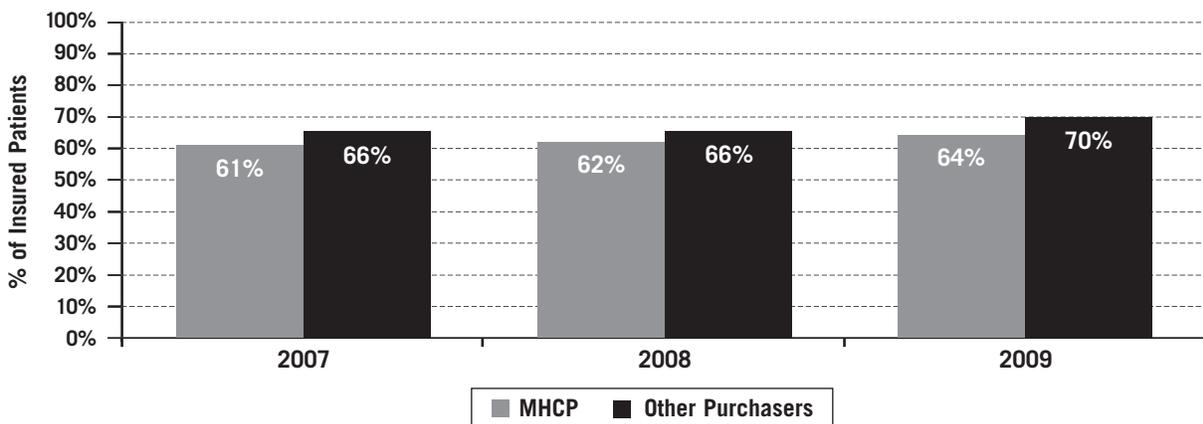
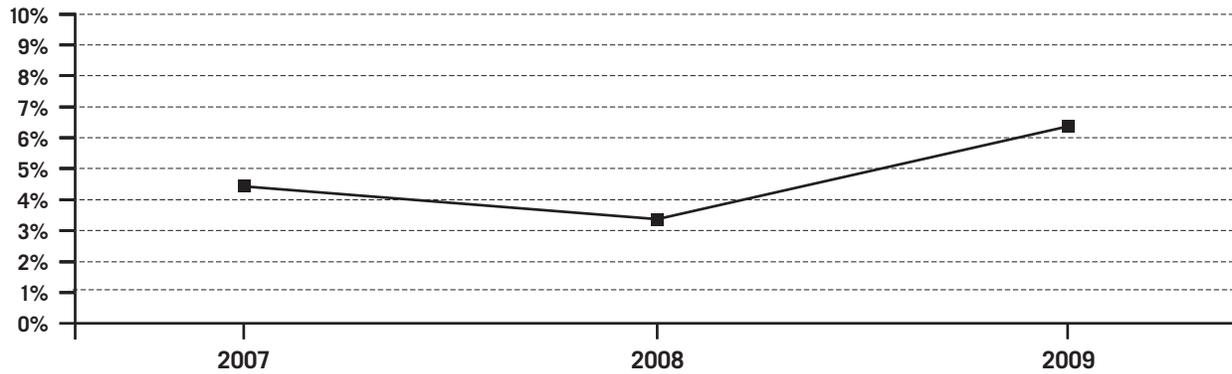


Figure 4.2 focuses on the gaps between purchasers over time. For the Controlling High Blood Pressure measure, the gap between purchasers has slowly widened since 2007.

**Figure 4.2 Controlling High Blood Pressure: Statewide Gaps between MHCP Patients and Patient Enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**

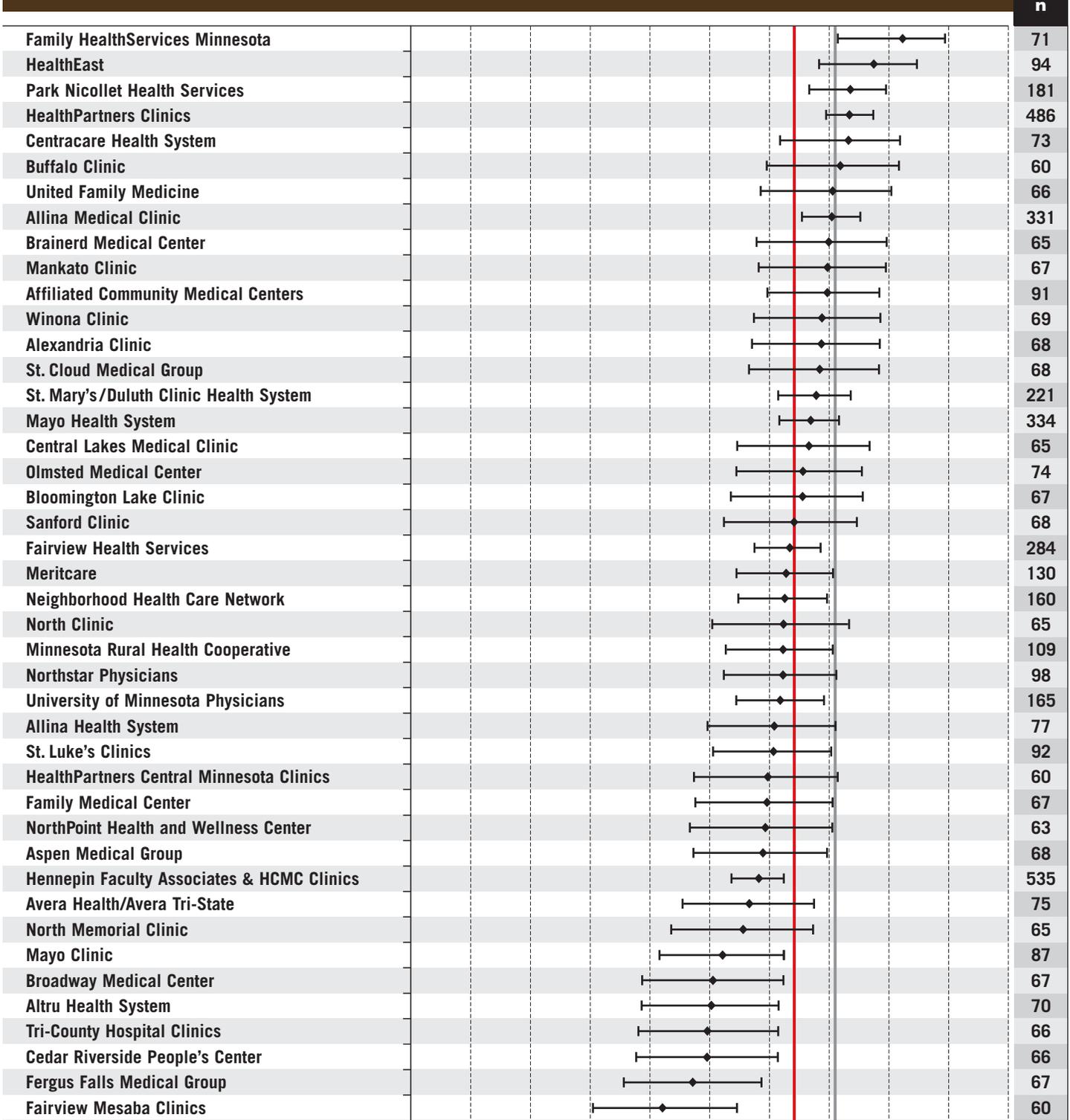


## Medical Group Performance Highlights

Chart 4 provides the Controlling High Blood Pressure MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 43 medical groups had at least 60 patients in their sample – a large enough sample to ensure a reasonable level of confidence in the reported rate. These 43 medical groups account for 5,215 of the 6,684 MHCP patients (78 percent) who are eligible for this measure statewide. The 43 medical groups account for 68 percent of medical groups reportable for this measure through MNCM's *2009 Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving this health care best practice with their patients enrolled in MHCP. The most successful medical group, **Family HealthServices Minnesota**, achieved best practice for 82 percent of their MHCP patients, while the least successful, **Fairview Mesaba**, achieved it with only 42 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 4: Controlling High Blood Pressure Rates by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in sample)



MHCP Medical Group Average\* 64%  
Other Purchasers Medical Group Average\* 71%

Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Family HealthServices Minnesota had the highest rate of Controlling High Blood Pressure with their MHCP patients, at 82 percent. Five medical groups had rates and confidence intervals that were fully above the medical group average of 64 percent for patients enrolled in MHCP:

- Family HealthServices Minnesota
- HealthPartners Clinics
- HealthEast
- Allina Medical Clinic
- Park Nicollet Health Services

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Controlling High Blood Pressure was made by **St. Mary's/Duluth Clinic Health System**, which achieved a 9 percentage point increase for their MHCP patients.

### Medical Group Performance Over Time (2007-2009)

This analysis was not conducted for this measure because the measure has only been reported for two years.

# “Living with Illness” measures

## Use of Appropriate Medications for People with Asthma (Ages 5-56)

This measures the percentage of patients ages 5-56 with persistent asthma who were appropriately prescribed medication. The data for this measure are collected from health plan claims.

MHCP patients have a significantly lower rate of acquiring appropriate asthma medications than patients enrolled with Other Purchasers ( $p < 0.05$ ). The statewide MHCP rate for this measure was 88 percent; the rate for Other Purchasers was 93 percent. Table 5 displays these statewide rates.

**Table 5: Statewide Rates\* for Use of Appropriate Medications for People with Asthma**

Purchasers	Statewide Rate*	95% CI	Denominator
MHCP	87.6%	86.5% - 88.6%	3,883
Other Purchasers	92.8%	92.3% - 93.2%	13,415

\* The statewide rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 5.1 displays the statewide rates over time. The rates for both purchasers have improved since 2004, but gaps between the rates for MHCP patients and patients enrolled with Other Purchasers have also been present every year since 2004.

The figure also displays the 2009 National HEDIS Medicaid and Commercial rates as benchmarks for comparison purposes. This shows that statewide, the rate at which this health care best practice is achieved with MHCP patients is slightly below the national HEDIS Medicaid benchmark, while the rate at which it is achieved with patients of Other Purchasers is slightly above the national HEDIS Commercial rate.

**Figure 5.1: Use of Appropriate Medications for People with Asthma Ages 5-56 Statewide Rates over Time**

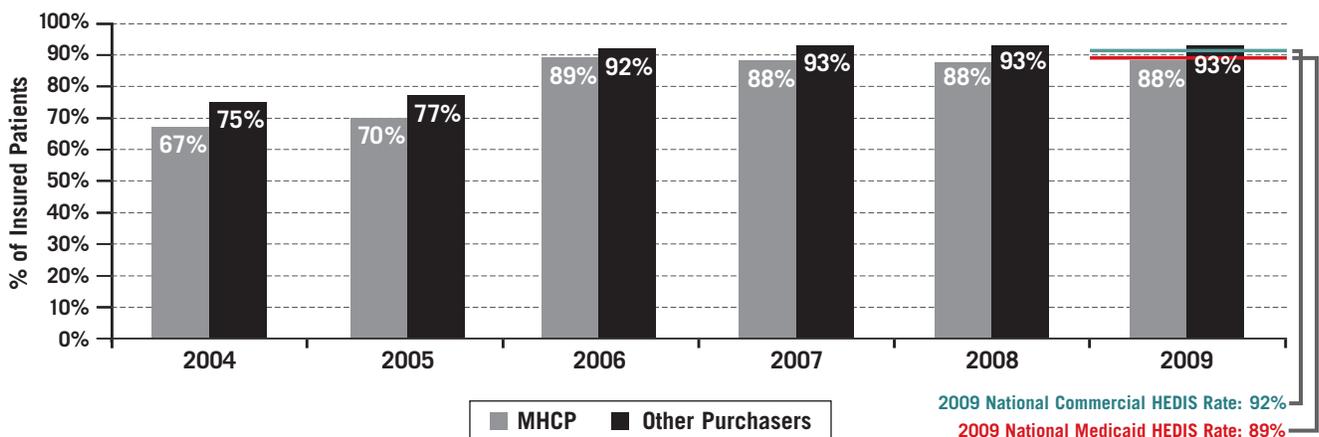
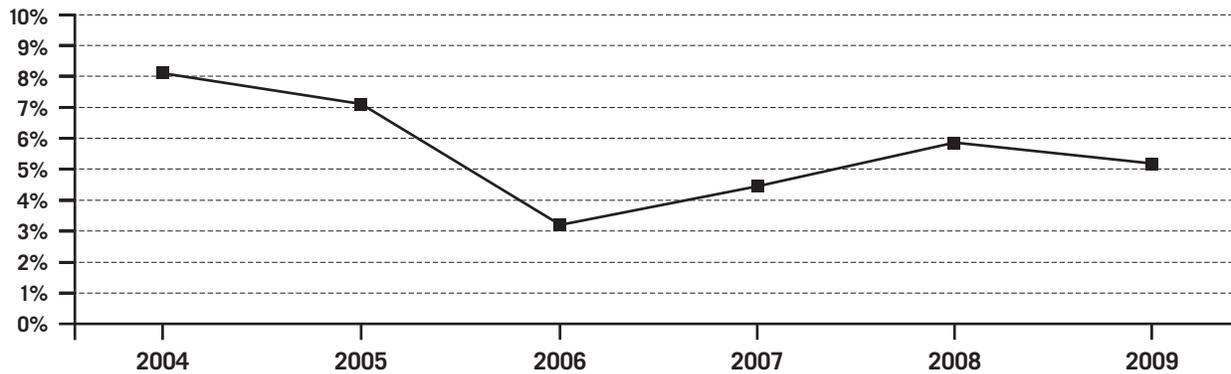


Figure 5.2 focuses on the gaps between purchasers over time. For the asthma measure, the gap between purchasers has narrowed since 2004 but this is not a statistically significant difference.

**Figure 5.2 Use of Appropriate Medications for People with Asthma Ages 5-56: Statewide Gaps between MHCP patients and patients enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**

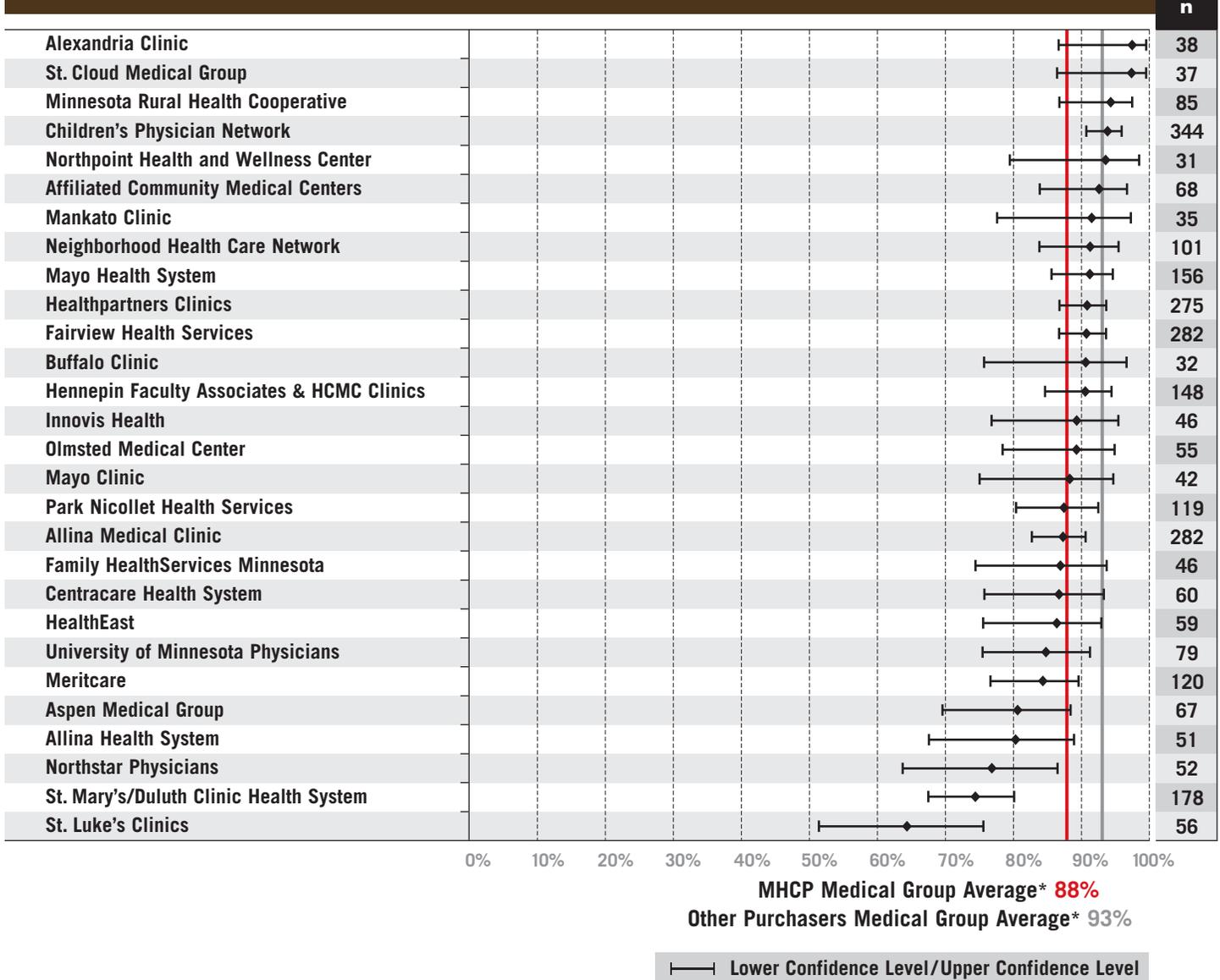


## Medical Group Performance Highlights

Chart 5.1 provides the Use of Appropriate Medications for People with Asthma (ages 5-56) MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 28 medical groups met the minimum threshold of at least 30 patients – a population large enough to ensure a reasonable level of confidence in the reported rate. These 28 medical groups account for 2,944 of the 3,883 MHCP patients (76 percent) who were eligible for this measure statewide. The 28 medical groups account for 45 percent of medical groups reportable for this measure through MNMCM’s *2009 Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving this health care best practice with their patients enrolled in MHCP. The most successful medical groups, **Alexandria Clinic** and **St. Cloud Medical Group**, achieved best practice for 97 percent of their MHCP patients, while **St. Luke’s Clinic**, the least successful, achieved it with only 64 percent. Chart 5.1 presents the MHCP rate distribution line for ages 5-56. A detailed table of medical group rates can be found in Appendix 3.

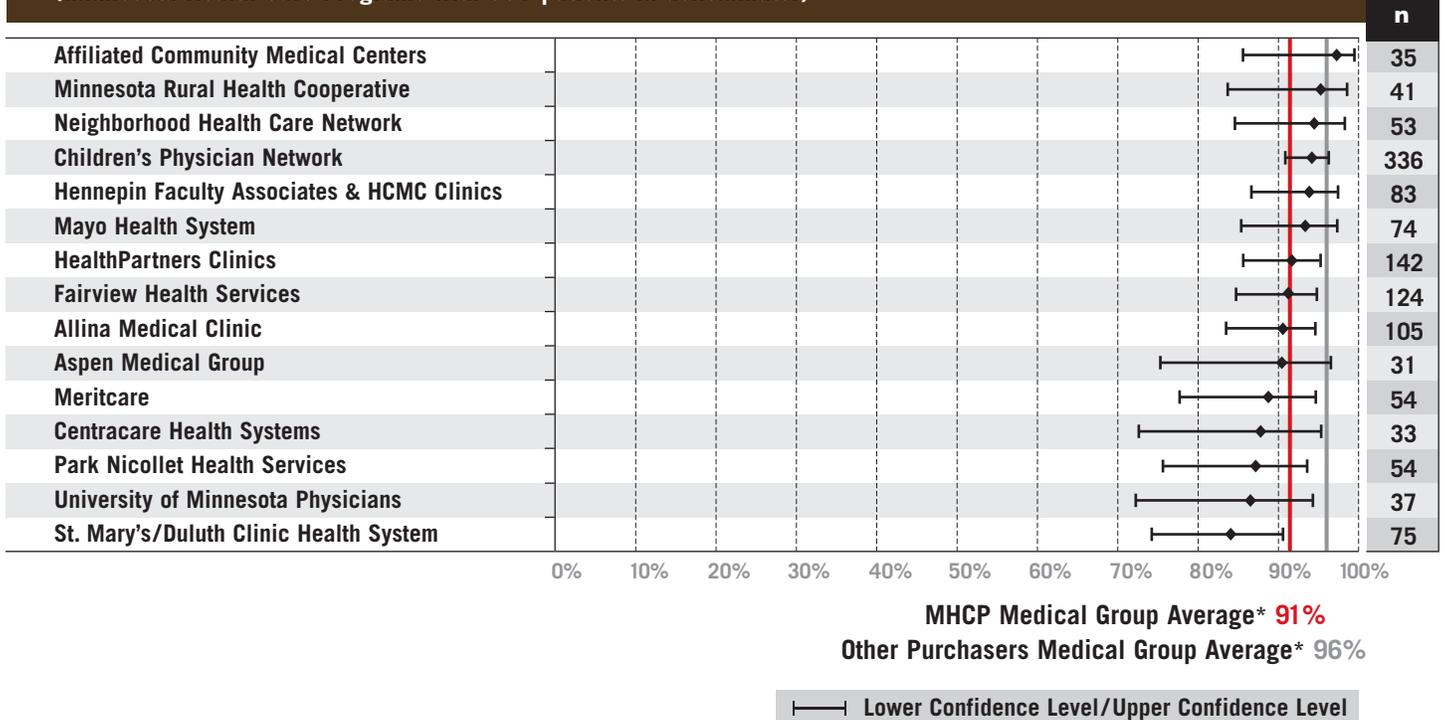
**Chart 5.1: Asthma Care Rates by Medical Group – Ages 5-56**  
 (Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

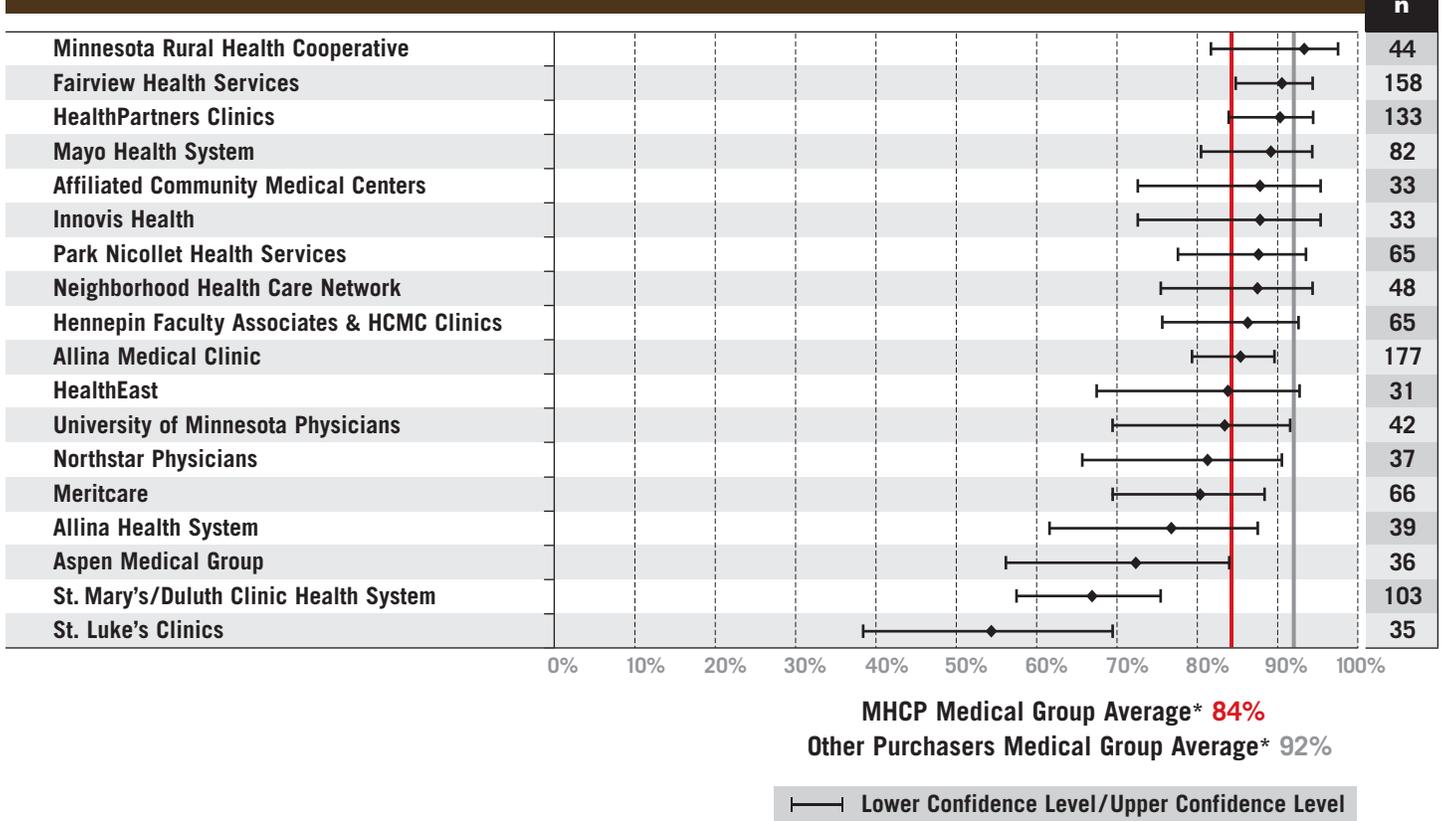
Frequently, it is helpful for medical groups to see performance rates for asthma care segmented for children and adults. Chart 5.2 provides the Use of Appropriate Medications for People with Asthma for children ages 5-17. Chart 5.3 provides medical group rates for this measure for adults ages 18-56. The MHCP rates are displayed by medical group from highest to lowest. The charts also include the average medical group rates for MHCP and Other Purchasers.

**Chart 5.2: Asthma Care Rates by Medical Group – Ages 5 - 17**  
(Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

**Chart 5.3: Asthma Care Rates by Medical Group – Ages 18-56**  
 (Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Children’s Physician Network was the only medical group with a rate and confidence interval fully above the medical group average for patients enrolled in MHCP between the ages of 5 and 56.

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Appropriate Medication for People with Asthma was made by Neighborhood Health Care Network, which achieved an 8 percentage point increase for their MHCP patients.

### Medical Group Performance Over Time (2007-2009)

Patterns of consistent improvement, consistent decreases, and relative stability are summarized below. A detailed table of medical group performance over time can be found in Appendix 4.

One medical group showed consistent improvement:

- Innovis Health

One medical group showed consistent decreases:

- HealthEast

Two groups had rates that were relatively stable:

- Affiliated Community Medical Centers
- Mayo Health System

Fifteen medical groups did not have a discernable pattern.

# “Getting Better” measures

## Appropriate Treatment for Children with Upper Respiratory Infection

This measures the percentage of children ages three months to 18 years with a diagnosis of upper respiratory infection (URI) who were not given an antibiotic prescription within three days. Appropriate treatment is to not provide an antibiotic, since most URIs are caused by a virus. A higher rate indicates appropriate treatment (i.e., the proportion for whom antibiotics were not prescribed). Data collected for this measure are from health plan claims.

MHCP patients and patient enrolled with Other Purchasers have similar rates of Appropriate Treatment for Children with Upper Respiratory Infections. The statewide rate for both purchasers is 87 percent. Table 6 displays these statewide rates.

**Table 6: Statewide Rates\* for Appropriate Treatment for Children with URI**

Purchasers	Statewide Rate*	95% CI	Denominator
MHCP	87.1%	86.6% - 87.6%	17,712
Other Purchasers	87.0%	86.6% - 87.5%	22,968

\* The statewide rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 6.1 displays the statewide rates over time. The rates for both purchasers have remained stable every year since 2006 when data were first collected for this measure. The gaps between purchasers have been small every year since 2006.

The figure also displays the 2009 National HEDIS Medicaid and Commercial rates as benchmarks for comparison. The statewide MHCP and Other Purchasers rates are both slightly above their respective national HEDIS benchmarks. In other words, Minnesota medical groups are slightly more successful in achieving this health care best practice with their patients, regardless of purchaser, than physicians nationwide.

**Figure 6.1: Appropriate Treatment for Children with URI statewide rates over time**

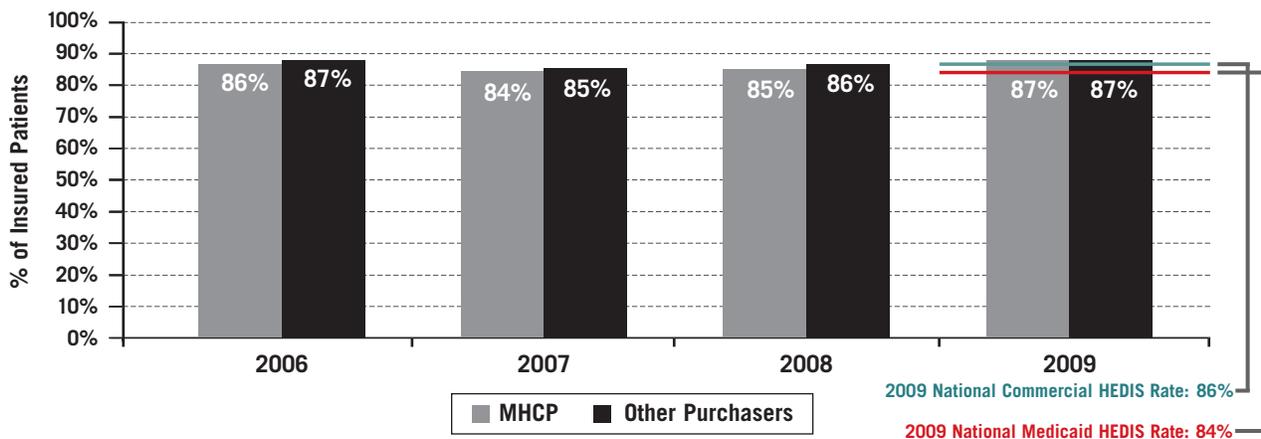
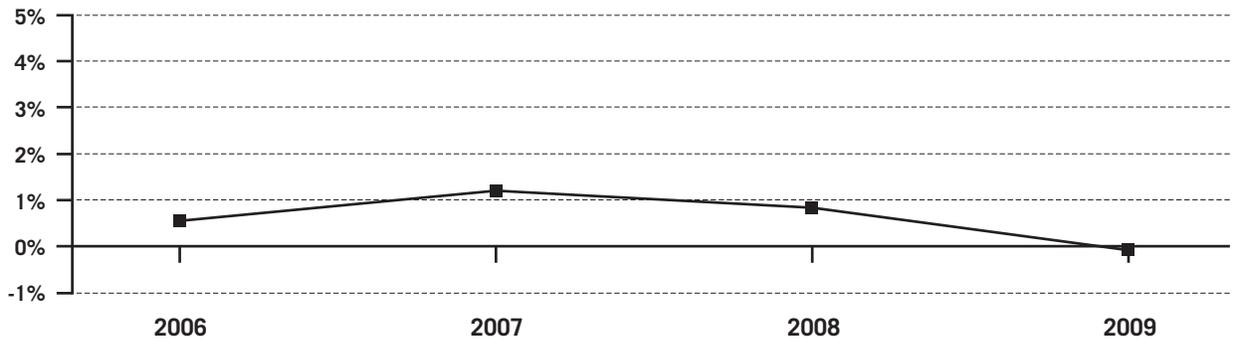


Figure 6.2 focuses on the gaps between purchasers over time. For the URI measure, the gap between purchasers has remained stable and small since 2006.

**Figure 6.2 Appropriate Treatment for Children with URI: Statewide Gaps between MHCP patients and patients Enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**



## Medical Group Performance Highlights

Chart 6 provides the MHCP rates of Appropriate Treatment for Children with URI by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 69 medical groups met the minimum threshold of at least 30 patients – a population large enough to ensure a reasonable level of confidence in the reported rate. These 69 medical groups account for 15,793 of the 17,712 MHCP patients (89 percent) who were eligible for this measure statewide. The 69 medical groups account for 78 percent of medical groups reportable for this measure through MNCM’s *2009 Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving this health care best practice with their patients enrolled in MHCP. The most successful medical group was **Priority Pediatrics Urgent Care**, who achieved best practice with 100 percent of their MHCP patients, while the least successful, **Avera Health**, achieved it with only 31 percent of the MHCP patients. A detailed table of medical group rates can be found in Appendix 3.

**Chart 6: Appropriate Treatment for Children with Upper Respiratory Infection by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

**Chart 6: Appropriate Treatment for Children with Upper Respiratory Infection by Medical Group – *continued***  
 (Minnesota Health Care Programs with 30+ patients in denominator)



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\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Priority Pediatrics Urgent Care had the highest URI rate for MHCP patients at 100 percent. Twenty-one medical groups had rates and confidence intervals that were fully above the medical group average of 87 percent for patients enrolled in MHCP:

- Priority Pediatrics Urgent Care
- Columbia Park Medical Group
- Suburban Emergency Associates
- Hennepin Faculty Associates and HCMC Clinics
- Family Practice Medical Center of Willmar
- HealthPartners Clinics
- NorthPoint Health and Wellness Center
- University of Minnesota Physicians
- Children’s Physician Network
- United Family Medicine
- North Memorial Clinic
- Metropolitan Pediatric Specialists
- Mayo Clinic
- HealthEast
- Allina Health System
- Allina Medical Clinic
- Park Nicollet Health Services
- Neighborhood Health Care Network
- Aspen Medical Group
- Meritcare
- Fairview Health Services

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Appropriate Treatment for Children with URI was made by **Winona Clinic**, which achieved a 22 percentage point increase for their MHCP patients.

### Medical Group Performance Over Time (2007-2009)

Patterns of consistent improvement, consistent decreases, and relative stability are summarized below. A detailed table of medical group performance over time can be found in Appendix 4.

Seven medical groups showed consistent improvement:

- Northstar Physicians
- St. Cloud Medical Group
- WestHealth Urgent Care
- Family Practice Medical Center of Willmar
- Affiliated Community Medical Centers
- HealthEast
- Family HealthServices Minnesota

One medical group showed consistent decreases:

- Broadway Medical Center

Five medical groups had rates that were relatively stable:

- Mille Lacs Clinics
- Fairview Health Services
- University of Minnesota Physicians
- North Memorial Clinic
- Apple Valley Medical Clinic

Forty-five medical groups did not have a discernable pattern.

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# “Getting Better” measures

## Appropriate Testing for Children with Pharyngitis

This measures the percentage of children ages 2-18 with Pharyngitis (a sore throat) who were given an antibiotic and a group A streptococcus (strep) test. Since Pharyngitis may be caused by a virus, best practice is to test for strep when ordering an antibiotic. A higher rate represents better performance (i.e., appropriate testing). The data collected for this measure are from health plan claims.

MHCP patients have a significantly lower rate of Appropriate Testing for Children with Pharyngitis than patients enrolled with Other Purchasers ( $p < 0.05$ ). This means that fewer MHCP patients with Pharyngitis who received an antibiotic also received appropriate testing. The MHCP statewide rate for Appropriate Testing for Children with Pharyngitis is 81 percent; the rate for Other Purchasers is 88 percent. Table 7 displays these statewide rates.

**Table 7: Statewide Rates\* for Appropriate Testing for Children with Pharyngitis**

Purchasers	Statewide Rate*	95% CI	Denominator
MHCP	80.7%	79.9% - 81.5%	8,884
Other Purchasers	88.2%	87.7% - 88.6%	21,370

\* The statewide rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 7.1 displays the statewide rates over time. The statewide rate for MHCP patients have improved every year since 2006 while the statewide rate for patients enrolled with Other Purchasers has remained somewhat stable since 2006 when data were first collected for this measure. Gaps exist between purchasers and these gaps have been present every year since 2006.

The figure also displays the 2009 National HEDIS Medicaid and Commercial rates as benchmarks for comparison. The statewide rates for both MHCP patients and patients enrolled with Other Purchasers are both well above their respective national HEDIS benchmarks.

**Figure 7.1: Appropriate Testing for Children with Pharyngitis Statewide Rates over Time**

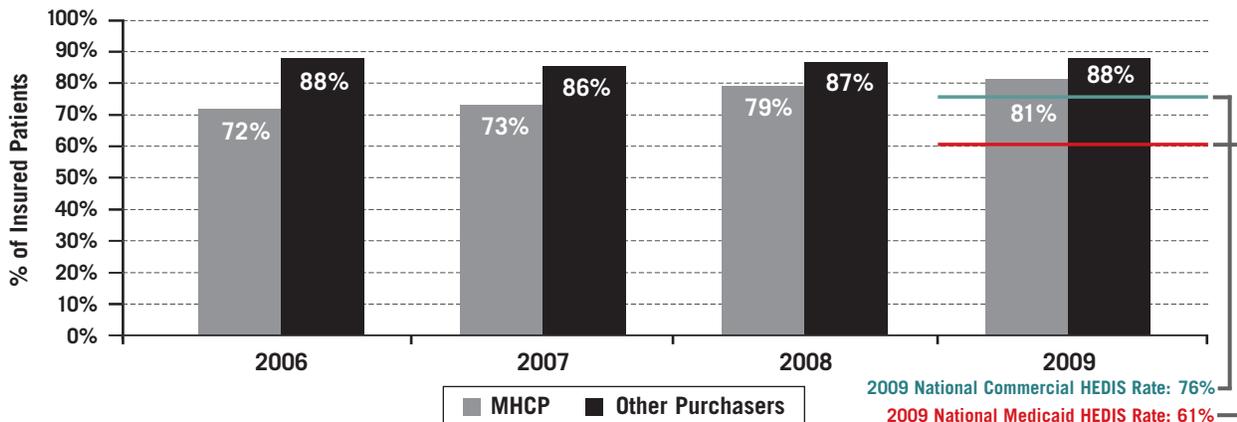
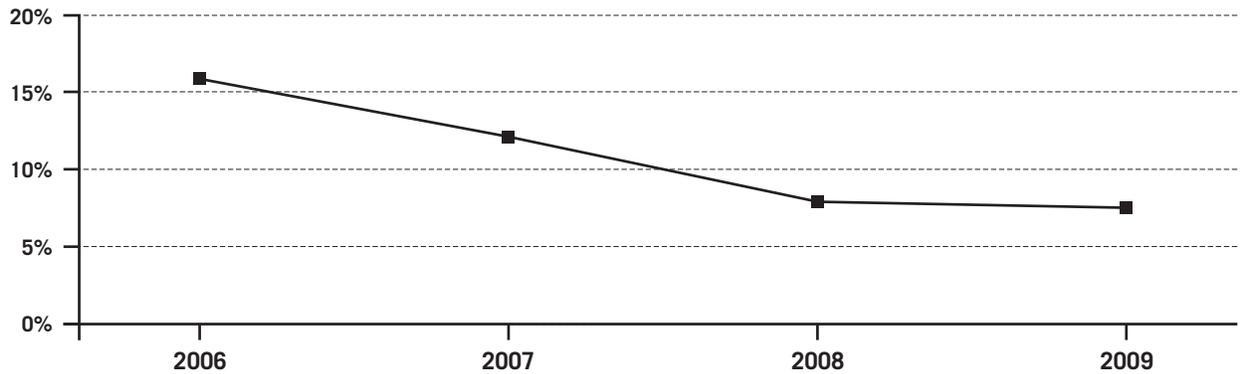


Figure 7.2 focuses on the gaps between purchasers over time. For the Appropriate Testing for Children with Pharyngitis measure, the gaps between purchasers have narrowed every year since 2006.

**Figure 7.2 Appropriate Testing for Children with Pharyngitis: Statewide Gaps between MHCP patients and patients Enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**

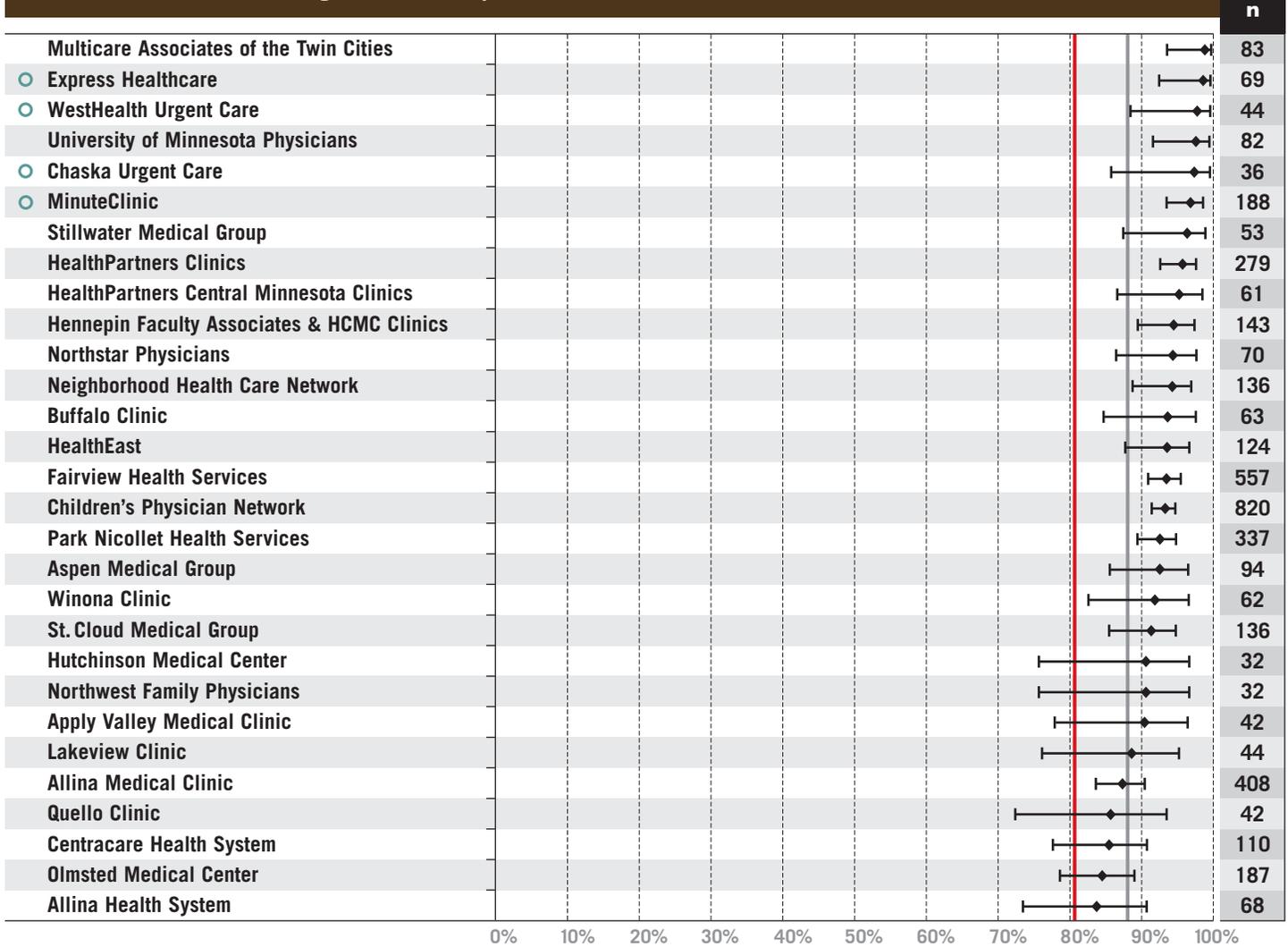


## Medical Group Performance Highlights

Chart 7 provides the Appropriate Testing for Children with Pharyngitis MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 57 medical groups met the minimum threshold of at least 30 patients – a population large enough to ensure a reasonable level of confidence in the reported rate. These 57 medical groups account for 7,537 of the 8,884 MHCP patients (85 percent) who were eligible for this measure statewide. The 57 medical groups account for 63 percent of medical groups reportable for this measure through MNCM’s *2009 Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving this health care best practice to their MHCP patients. The most successful medical groups, **Multicare Associates of the Twin Cities** and **Express Healthcare**, achieved best practice with 99 percent of their MHCP patients, while the least successful, **Riverwood Aitkin**, achieved it with only 34 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 7: Appropriate Testing for Children with Pharyngitis by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)

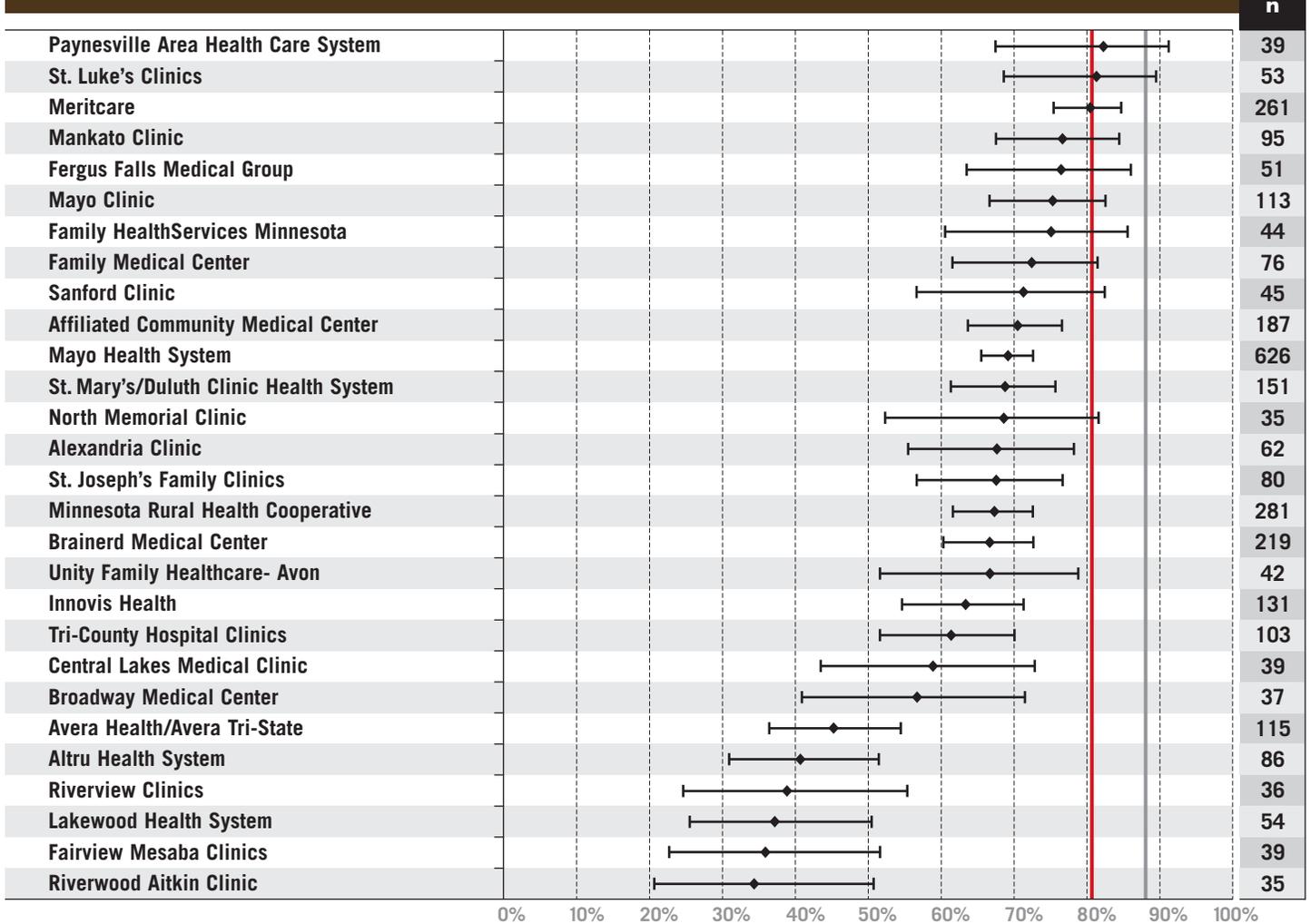


MHCP Medical Group Average\* 81%  
Other Purchasers Medical Group Average\* 88%

○ Urgent/Convenience Care    ─── Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

**Chart 7: Appropriate Testing for Children with Pharyngitis by Medical Group – *continued***  
 (Minnesota Health Care Programs with 30+ patients in denominator)



**MHCP Medical Group Average\* 81%**  
**Other Purchasers Medical Group Average\* 88%**

○ Urgent/Convenience Care    — Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

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## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Multicare Associates of the Twin Cities and Express Healthcare had the highest rate of Appropriate Testing of Children with Pharyngitis at 99 percent. Twenty-one medical groups had rates and confidence intervals that were fully above the medical group average of 81 percent for patients enrolled in MHCP:

- Multicare Associates of the Twin Cities
- Express Healthcare
- WestHealth Urgent Care
- University of Minnesota Physicians
- Chaska Urgent Care
- MinuteClinic
- Stillwater Medical Group
- HealthPartners Clinics
- HealthPartners Central Minnesota Clinics
- Hennepin Faculty Associates & HCMC Clinics
- Northstar Physicians
- Neighborhood Health Care Network
- Buffalo Clinic
- HealthEast
- Fairview Health Services
- Children’s Physician Network
- Park Nicollet Health Services
- Aspen Medical Group
- Winona Clinic
- St. Cloud Medical Group
- Allina Medical Clinic

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Appropriate Testing for Children with Pharyngitis was made by Fergus Falls Medical Group, which achieved a 25 percentage point increase over last year’s rate for their MHCP patients.

### Medical Group Performance Over Time (2007-2009)

Patterns of consistent improvement, consistent decreases, and relative stability are summarized below. A detailed table of medical group performance over time can be found in Appendix 4.

Five medical groups showed consistent improvement:

- Avera Health/Avera Tri-State
- Mankato Clinic
- MeritCare
- Fairview Mesaba Clinics
- Northstar Physicians

One medical group showed consistent decreases:

- Alexandria Clinic

One medical group had rates that were relatively stable:

- HealthPartners Clinics

Forty medical groups did not have a discernable pattern.

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# “Staying Healthy” measures

## Breast Cancer Screening

This measures the percentage of women ages 52-69 who received a mammogram in the prior two years. The data for this measure are collected from health plan claims.

MHCP patients have a significantly lower rate of Breast Cancer Screening than patients enrolled with Other Purchasers ( $p < 0.05$ ). The MHCP statewide rate for Breast Cancer Screening is 62 percent; the rate for Other Purchasers is 78 percent. This means that, statewide, 62 percent of women enrolled in MHCP had Breast Cancer Screening according to guidelines while 78 percent of women enrolled with Other Purchasers did so. Table 8 displays these statewide rates.

**Table 8: Statewide Rates\* for Breast Cancer Screening**

Purchasers	Statewide Rate*	95% CI	Denominator
MHCP	61.9%	60.8% - 62.9%	7,761
Other Purchasers	77.9%	77.7% - 78.1%	146,269

\* The statewide rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 8.1 displays the statewide rates over time. The rates for both purchasers have improved since 2004. Since 2007, the rates for MHCP patients have consistently improved, while the rates for patients enrolled with Other Purchasers have remained relatively stable since 2005. Gaps between purchasers have been present every year since 2004.

**Figure 8.1: Breast Cancer Screening Statewide Rates over Time**

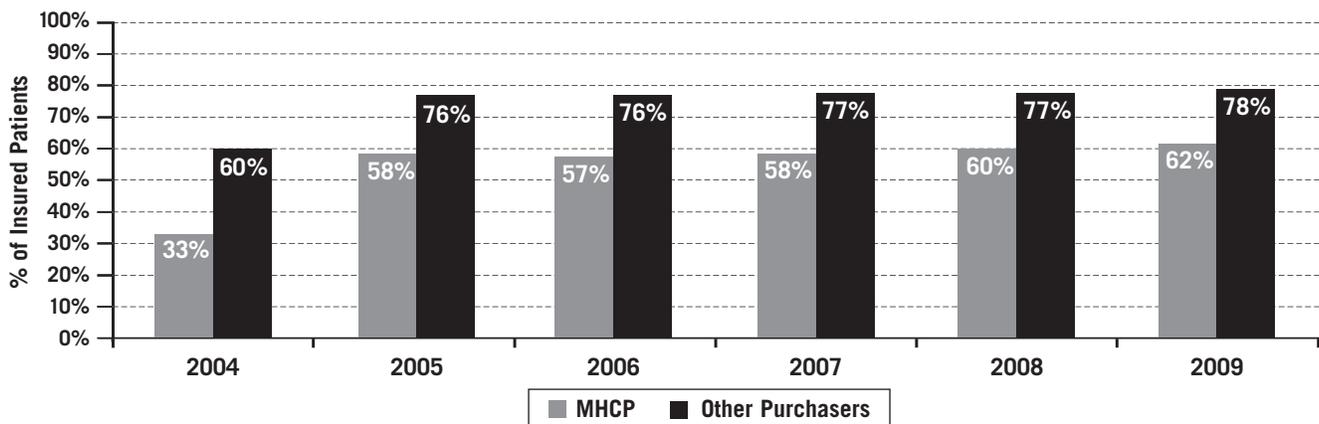
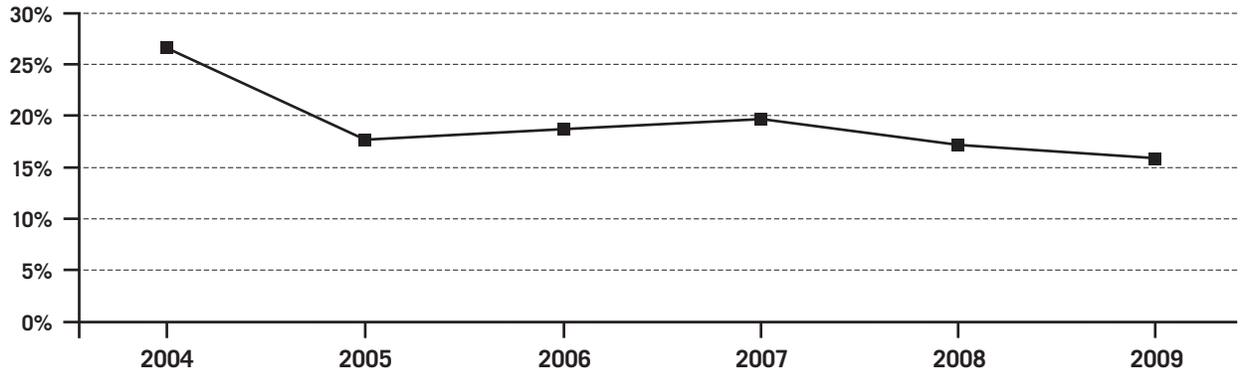


Figure 8.2 focuses on the gaps between purchasers over time. For the Breast Cancer Screening measure, the gap declined substantially between 2004 and 2005 and remained relatively stable in the subsequent years, with relatively small annual decreases from 2007 to 2009.

**Figure 8.2 Breast Cancer Screening: Statewide Gaps between Purchasers by Year (Other Purchasers - MHCP)**

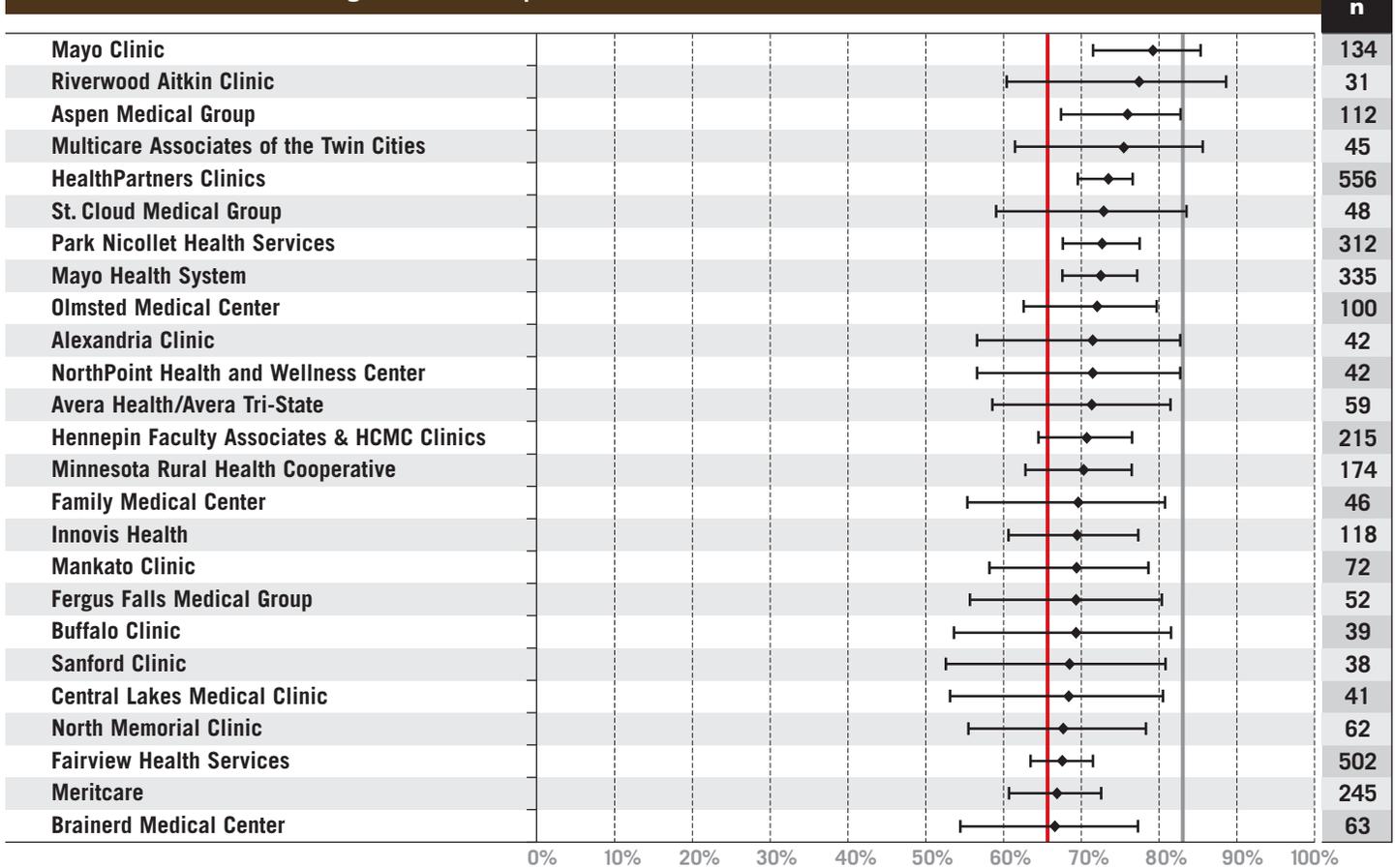


## Medical Group Performance Highlights

Chart 8 provides the Breast Cancer Screening MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 50 medical groups met the minimum threshold of at least 30 patients – a population large enough to ensure a reasonable level of confidence in the reported rate. These 50 medical groups account for 6,047 of the 7,761 MHCP patients (78 percent) who were eligible for this measure statewide. The 50 medical groups account for 42 percent of medical groups reportable for this measure through MNMCM’s 2009 *Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving this health care best practice with their MHCP patients. The most successful medical group, **Mayo Clinic**, achieved best practice with 79 percent of their MHCP patients, while the least successful medical group, **Cedar Riverside People’s Center**, achieved it with only 42 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 8: Breast Cancer Screening by Medical Group**  
 (Minnesota Health Care Programs with 30+ patients in denominator)

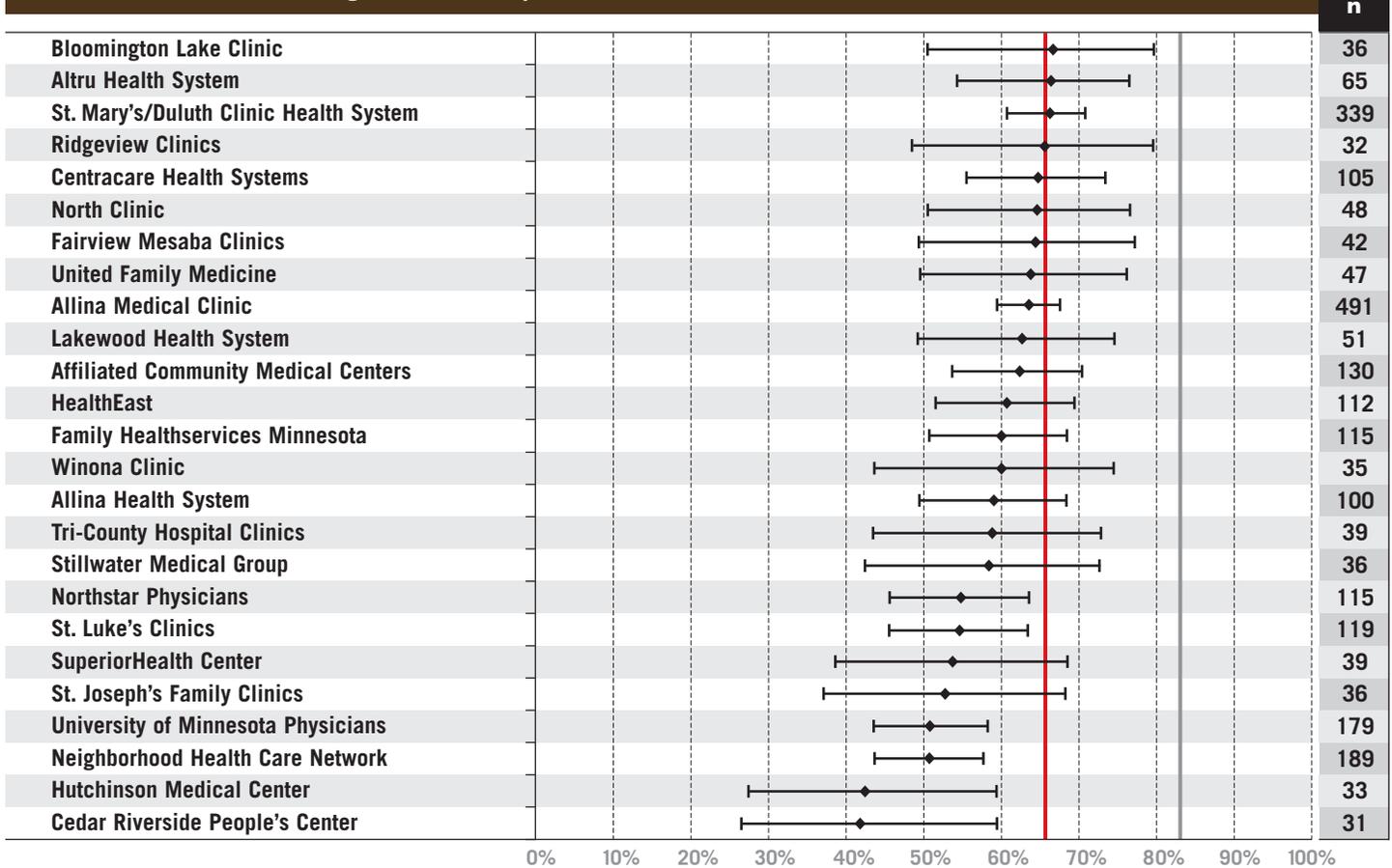


MHCP Medical Group Average\* **66%**  
 Other Purchasers Medical Group Average\* **83%**

Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

**Chart 8: Breast Cancer Screening by Medical Group – *continued***  
 (Minnesota Health Care Programs with 30+ patients in denominator)



MHCPC Medical Group Average\* **66%**

Other Purchasers Medical Group Average\* **83%**

— Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Mayo Clinic had the highest Breast Cancer Screening rate for MHCP patients at 79 percent. Five medical groups had rates and confidence intervals that were fully above the medical group average of 66 percent for patients enrolled in MHCP:

- Mayo Clinic
- Aspen Medical Group
- HealthPartners Clinics
- Park Nicollet Health Services
- Mayo Health System

### Biggest Improvement from 2008-2009

The greatest improvements since report year 2008 in Breast Cancer Screening were made by **United Family Medicine** and **MultiCare Associates of the Twin Cities** with each medical group achieving an increase greater than 14 percentage points.

### Medical Group Performance Over Time (2007-2009)

Patterns of consistent improvement, consistent decreases, and relative stability are summarized below. A detailed table of medical group performance over time can be found in Appendix 4.

Eight medical groups showed consistent improvement:

- United Family Medicine
- MultiCare Associates of the Twin Cities
- Avera Health/Avera Tri-State
- Family Medical Center
- Family HealthServices Minnesota
- Fairview Health Services
- North Memorial Clinic
- Minnesota Rural Health Cooperative

Five medical groups showed consistent decreases:

- Mankato Clinic
- North Clinic
- Fergus Falls Medical Group
- Central Lakes Medical Clinic
- Hutchinson Medical Center

One medical group had rates that were relatively stable:

- Northstar Physicians

Twenty-seven medical groups did not have a discernable pattern.

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# “Staying Healthy” measures

## Cervical Cancer Screening

This measures the percentage of women ages 24-64 who received one or more Pap tests to screen for cervical cancer in the measurement year or the two years prior to the measurement year. The data for this measure are collected from health plan claims.

For MHCP members, the continuous enrollment requirement is one year. Cervical Cancer Screening is the only measure that according to HEDIS enrollment definitions has a different continuous enrollment criterion for MHCP patients (one year) versus patients enrolled with Other Purchasers (three years). This adjustment in the continuous enrollment criterion allows more MHCP patients to be represented in the measure denominator.

MHCP patients have a significantly lower rate of Cervical Cancer Screening than patients enrolled with Other Purchasers ( $p < 0.05$ ). The MHCP statewide rate for Cervical Cancer Screening is 71 percent; the rate for Other Purchasers is 77 percent. Table 9 displays these statewide rates.

**Table 9: Statewide Rates\* for Cervical Cancer Screening**

Purchasers	Statewide Rate*	95% CI	Denominator
MHCP	71.0%	70.6% - 71.5%	35,724
Other Purchasers	76.8%	76.6% - 77.0%	199,980

\* The statewide rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 9.1 displays the statewide rates over time. The rates for patients of both purchasers increased substantially from 2004 to 2006 and have been relatively stable since then.

The figure also includes the 2009 National HEDIS Medicaid and Commercial rates as benchmarks for comparison. The statewide MHCP rate has exceeded the 2009 national Medicaid HEDIS benchmark; the Other Purchasers rate is below the 2009 national HEDIS Commercial benchmark.

**Figure 9.1: Cervical Cancer Screening Statewide Rates over Time**

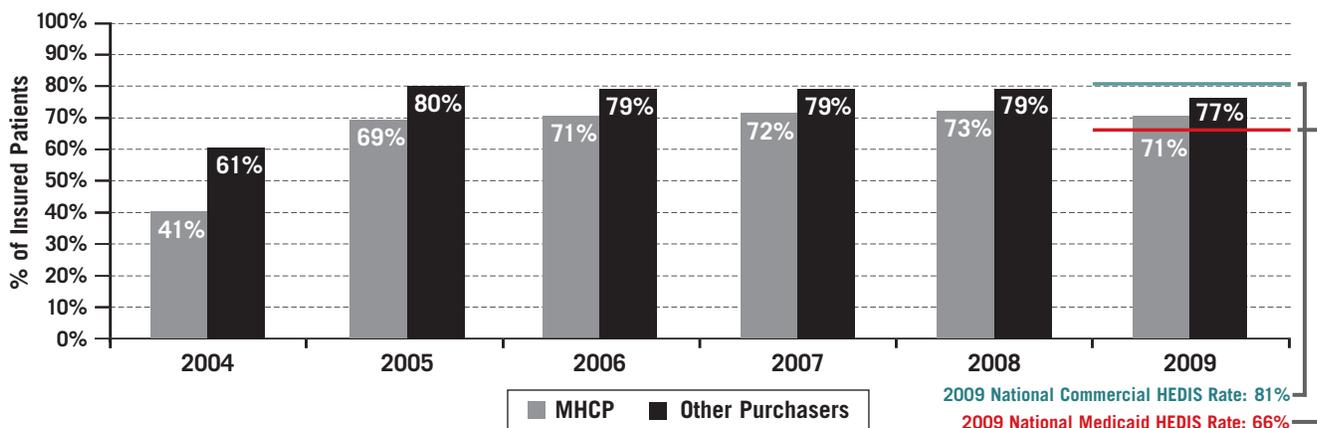
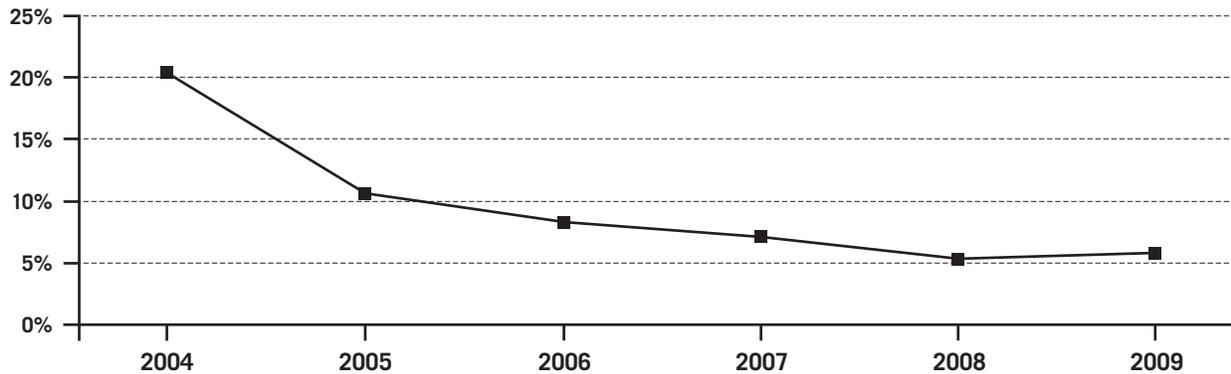


Figure 9.2 focuses on the gaps between purchasers over time. For the Cervical Cancer Screening measure, the gap has narrowed considerably since 2004 and this change is statistically significant ( $P_{trend} = 0.029$ ).

**Figure 9.2 Cervical Cancer Screening: Statewide Gaps between MHCP patients and patients Enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**

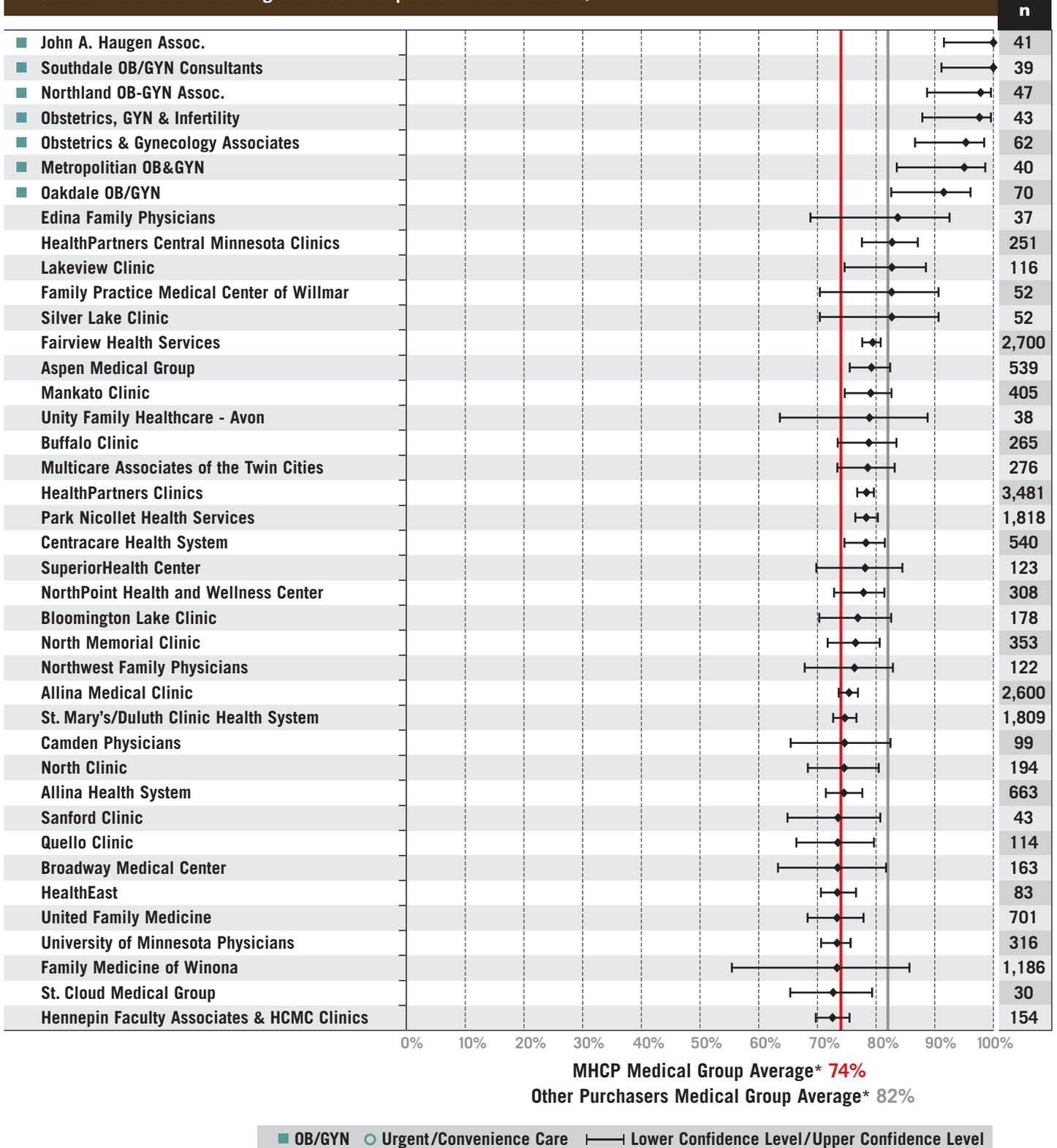


## Medical Group Performance Highlights

Chart 9 provides the Cervical Cancer Screening MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 79 medical groups met the minimum threshold of at least 30 patients – a population large enough to ensure a reasonable level of confidence in the reported rate. These 79 medical groups account for 30,621 of the 35,724 MHCP patients (86 percent) who were eligible for this measure statewide. The 28 medical groups account for 62 percent of medical groups reportable for this measure through MNMCM’s *2009 Health Care Quality Report*.

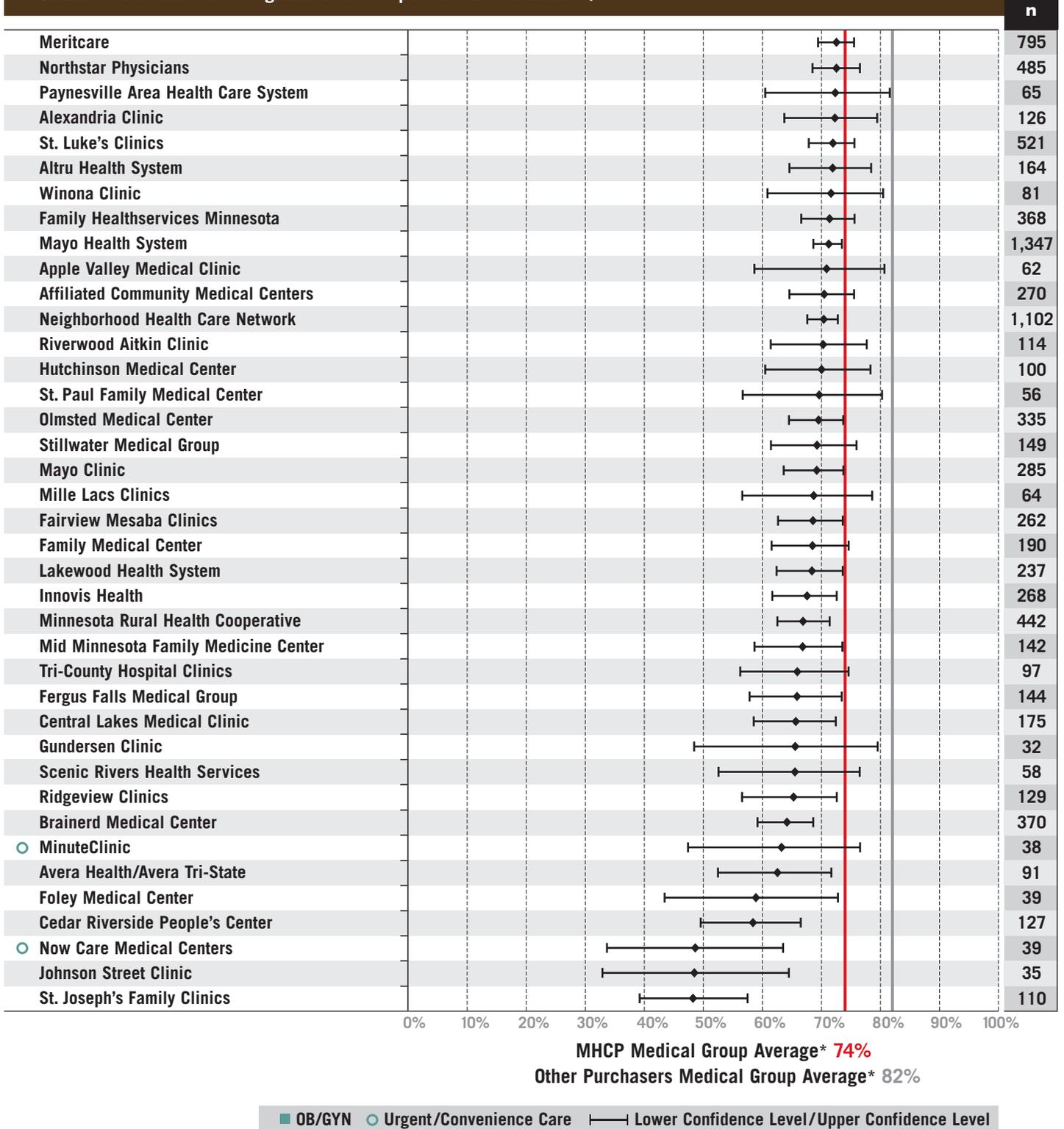
There was wide variation in the degree to which medical groups were successful in achieving this health care best practice with their MHCP patients. The most successful medical groups, **John A. Haugen Associates** and **Southdale OB/GYN Consultants**, achieved best practice with 100 percent of their MHCP patients, while the least successful, **St. Joseph’s Family Clinics**, achieved it with only 48 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 9: Cervical Cancer Screening by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

**Chart 9: Cervical Cancer Screening by Medical Group – *continued***  
 (Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

John A. Haugen Associates and Southdale OB/GYN Consultants had the highest Cervical Cancer Screening rate for MHCP patients at 100 percent. Fifteen medical groups had rates and confidence intervals that were fully above the medical group average of 74 percent for patients enrolled in MHCP:

- John A. Haugen Associates
- Southdale OB/GYN Consultants
- Northland OB/GYN Assoc.
- OB/GYN & Infertility
- Obstetrics & Gynecology Associates
- Metropolitan OB/GYN
- Oakdale OB/GYN
- HealthPartners Central Minnesota Clinics
- Lakeview Clinic
- Fairview Health Services
- Aspen Medical Group
- Mankato Clinic
- HealthPartners Clinic
- Park Nicollet Health Services
- Centracare Health System

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Cervical Cancer Screening was made by Silver Lake Clinic, which achieved a 13 percentage point increase over last year's rate for their MHCP patients.

### Medical Group Performance Over Time (2007-2009)

Patterns of consistent improvement, consistent decreases, and relative stability are summarized below. A detailed table of medical group performance over time can be found in Appendix 4.

Three medical groups showed consistent improvement:

- St. Paul Family Medical Center
- HealthPartners Central Minnesota Clinics
- Northwest Family Physicians

Seven medical groups showed consistent decreases:

- Family HealthServices Minnesota
- Quello Clinic
- Stillwater Medical Group
- Olmsted Medical Center
- Winona Clinic
- Brainerd Medical Center
- Foley Medical Center

Five medical groups had rates that were relatively stable:

- Buffalo Clinic
- Mayo Health System
- HealthEast
- Neighborhood Health Care Network
- HealthPartners Clinics

Forty-nine medical groups did not have a discernable pattern.

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# “Staying Healthy” measures

## Colorectal Cancer Screening

This measures the percentage of adults ages 51-80 who had appropriate screening for colorectal cancer. The data for this measure are collected from health plan claims and medical record review.

MHCP patients have a significantly lower rate of Colorectal Cancer Screening than patients enrolled with Other Purchasers ( $p < 0.05$ ). The MHCP statewide rate for Colorectal Cancer Screening was 39 percent; the rate for Other Purchasers was 68 percent. This means that while 68 percent of patients enrolled with Other Purchasers received appropriate colorectal cancer screening, only 39 percent of patients enrolled in MHCP did. Table 10 displays these statewide rates. This 29 percentage point difference is the largest gap between MHCP and Other Purchasers of any measures in this report.

**Table 10: Statewide Weighted Rates\* for Colorectal Cancer Screening**

Purchasers	Statewide Weighted Rate*	95% CI	Denominator (Patients sampled)
MHCP	39.2%	37.8% - 40.6%	4,579
Other Purchasers	68.0%	66.6% - 69.4%	4,530

\* The statewide weighted rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 10.1 displays the statewide rates over time. The rates for both purchasers have improved since 2006, although the rate for MHCP declined slightly from 2008 to 2009.

**Figure 10.1: Colorectal Cancer Screening Statewide Rates over Time**

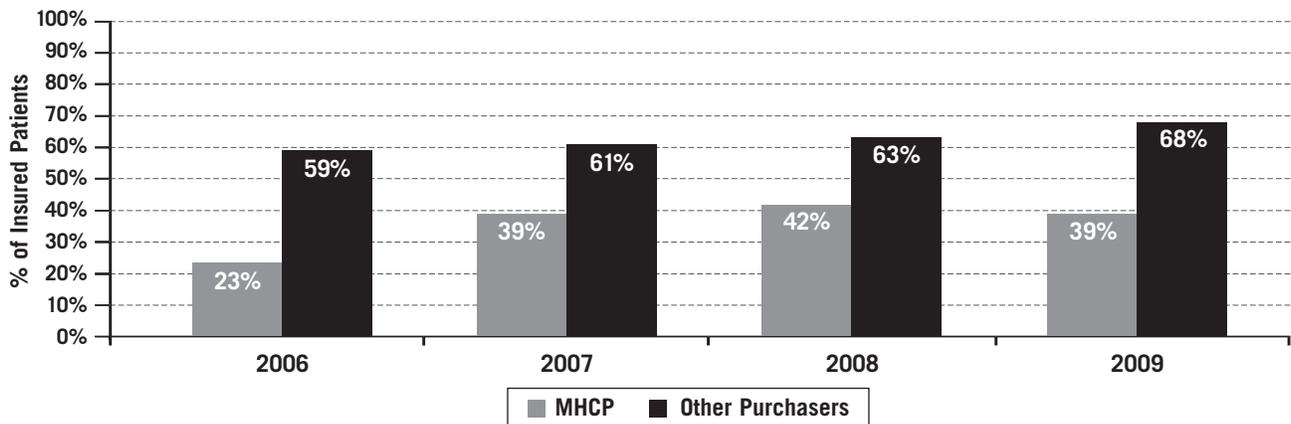
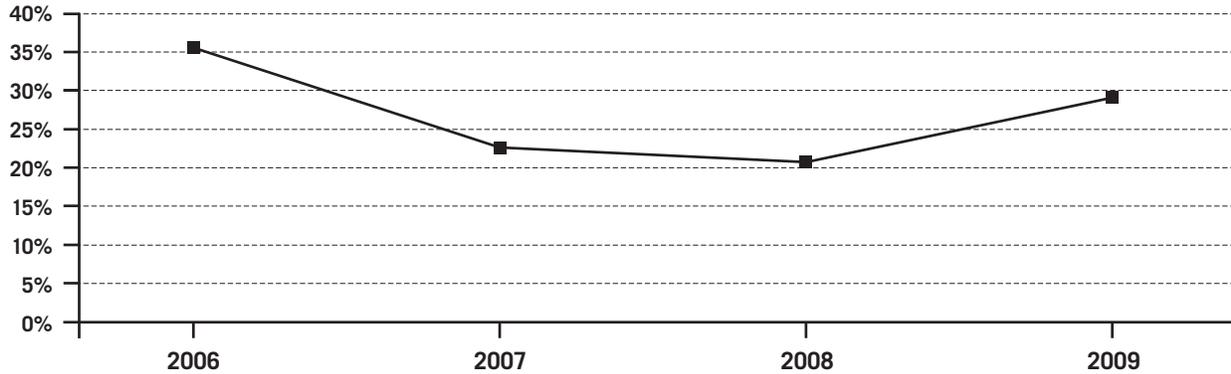


Figure 10.2 focuses on the gaps between purchasers over time. For the Colorectal Cancer Screening measure, the gap between purchasers narrowed considerably from 2006 to 2008 but increased from 2008 to 2009.

**Figure 10.2: Colorectal Cancer Screening: Statewide Gaps between MHCP patients and patients Enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**

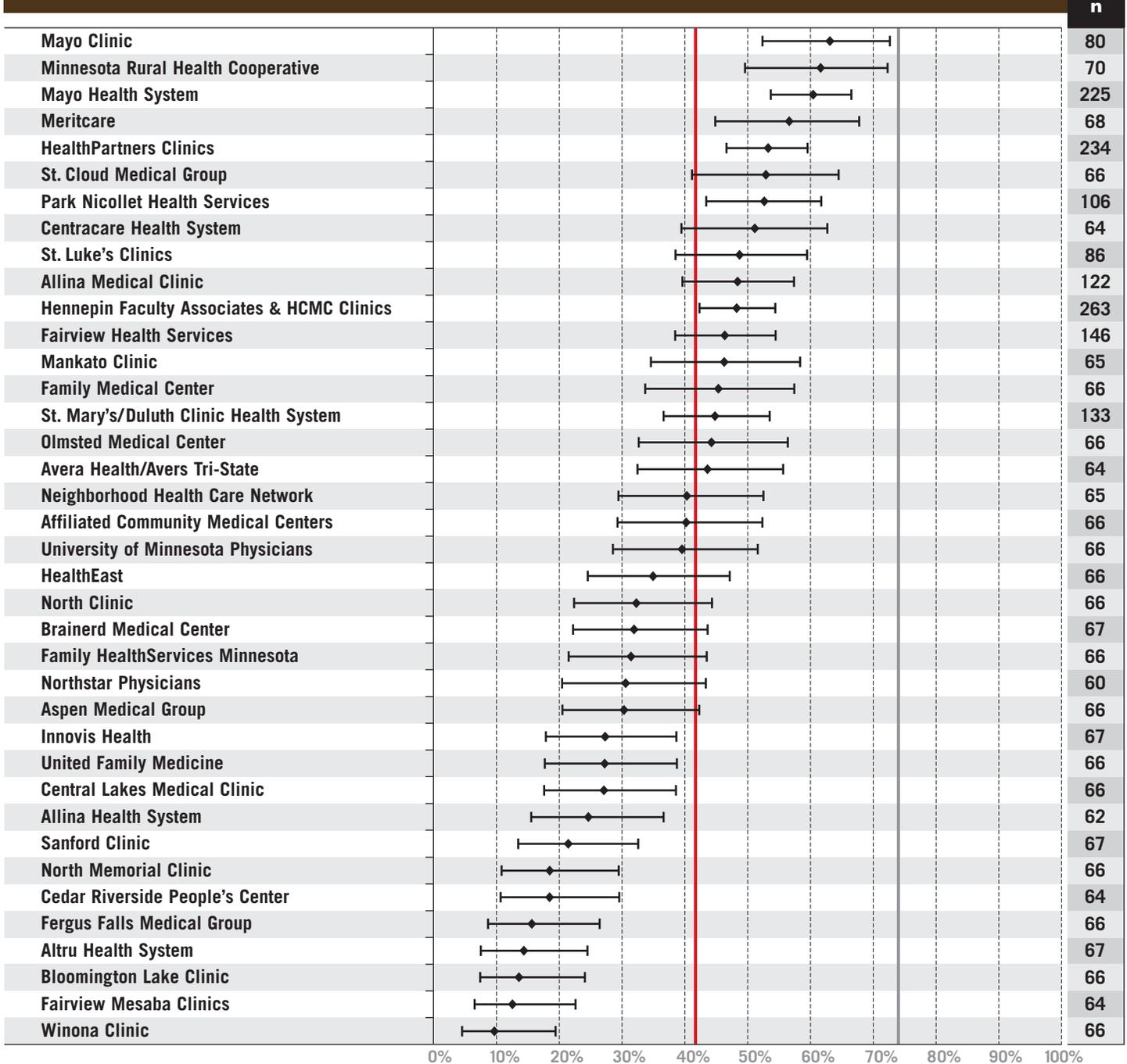


## Medical Group Performance Highlights

Chart 10 provides the Colorectal Cancer Screening MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 38 medical groups met the minimum threshold of at least 60 patients – a large enough sample to ensure a reasonable level of confidence in the reported rate. These 38 medical groups account for 3,299 of the 4,579 MHCP patients (72 percent) who were eligible for this measure statewide. The 38 medical groups account for 63 percent of medical groups reportable for this measure through MNCM’s *2009 Health Care Quality Report*.

There was wide variation in the degree to which medical groups were successful in achieving this health care best practice for their MHCP patients. The most successful medical group, **Mayo Clinic**, achieved best practice with 63 percent of their MHCP patients, while the least successful medical group, **Winona Clinic**, achieved it with only 10 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 10: Colorectal Cancer Screening by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in denominator)



MCHP Medical Group Average\* **42%**

Other Purchasers Medical Group Average\* **74%**

Lower Confidence Level/Upper Confidence Level

\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Mayo Clinic had the highest Colorectal Cancer Screening rate for MHCP patients at 63 percent. Seven medical groups had rates and confidence intervals that were fully above the medical group average of 42 percent for patients enrolled in MHCP:

- Mayo Clinic
- Minnesota Rural Health Cooperative
- Mayo Health System
- Meritcare
- HealthPartners Clinics
- Park Nicollet Health Services
- Hennepin Faculty Associates & HCMC Clinics

### Biggest Improvement

While statewide trends have been calculated for this measure, this is the first Health Care Disparities Report that included medical group rates for Colorectal Cancer Screening. Identifying medical groups with the biggest improvement for MHCP patients was not possible because this was the first year that MHCP rates were calculated for medical groups for this measure.

### Medical Group Performance Over Time (2007-2009)

While statewide trends have been calculated for this measure, this is the first Health Care Disparities Report that included medical group rates for Colorectal Cancer Screening. Analyzing medical group performance over time was not possible.

## “Staying Healthy” measures

### Chlamydia Screening in Women

This measures the percentage of sexually active women aged 16-24 who had at least one test for Chlamydia during the measurement year. The data for this measure are collected from health plan claims.

MHCP patients have a significantly higher rate of Chlamydia Screening than patients enrolled with Other Purchasers ( $p < 0.05$ ). The MHCP statewide rate for Chlamydia Screening was 56 percent; the rate for Other Purchasers was 45 percent. Table 11 displays these statewide rates.

**Table 11: Statewide Rates\* for Chlamydia Screening in Women**

Purchasers	Statewide Rate*	95% CI	Denominator
MHCP	56.1%	55.3% - 57.0%	12,155
Other Purchasers	44.8%	44.3% - 45.2%	42,688

\* The statewide rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

#### Figure 11.1: Chlamydia Screening statewide rates over time

The measurement specifications have changed since last year; a comparison over time is not possible.

#### Figure 11.2: Chlamydia Screening: Statewide Gaps between Purchasers by Year

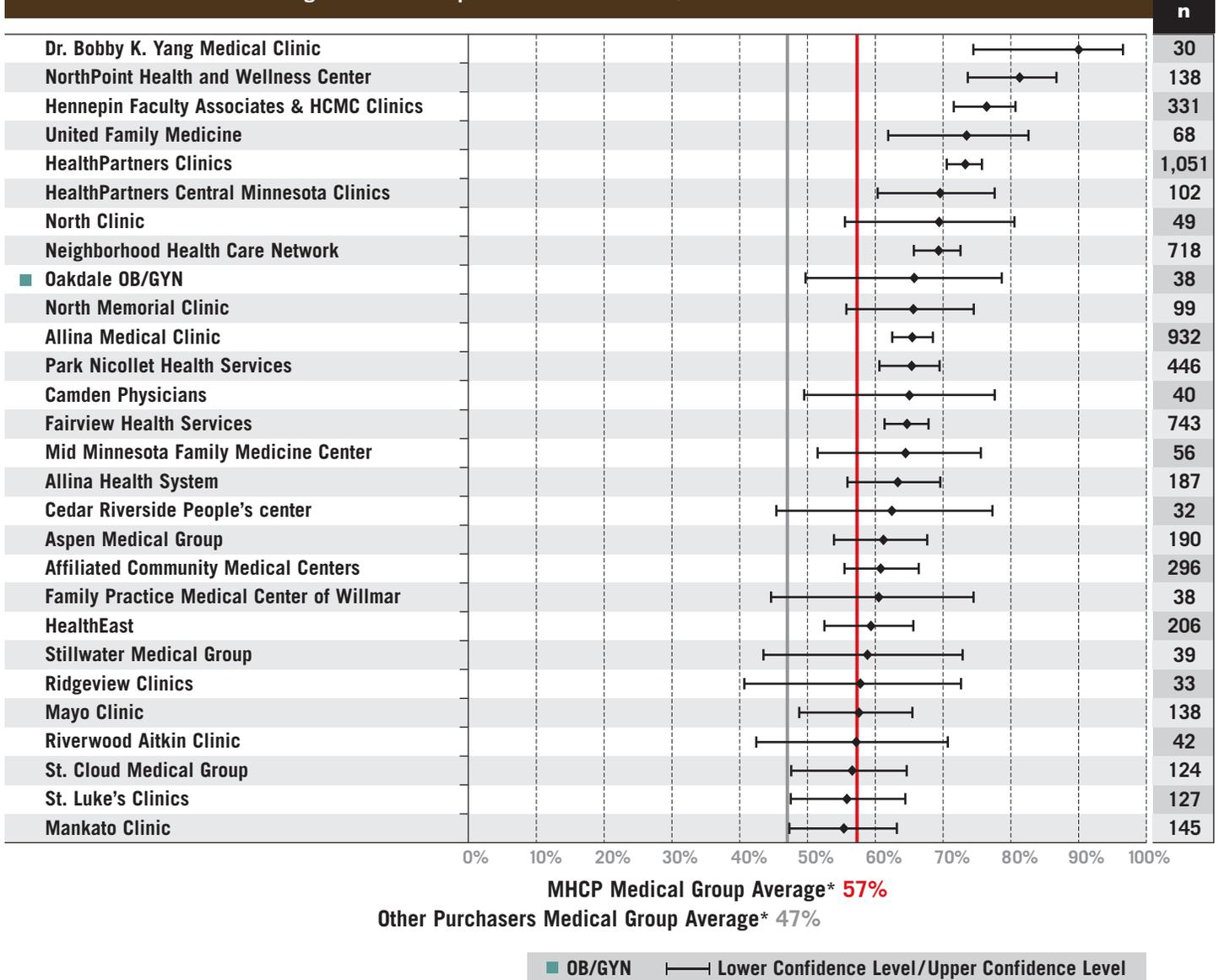
The measurement specifications have changed since last year; a comparison over time is not possible.

## Medical Group Performance Highlights

Chart 11 provides the Chlamydia Screening MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 56 medical groups met the minimum threshold of at least 30 patients – a population large enough to ensure a reasonable level of confidence in the reported rate. These 56 medical groups account for 10,448 of the 12,155 MHCP patients (86 percent) who were eligible for this measure statewide. The 56 medical groups account for 54 percent of medical groups reportable for this measure through MNMCM's 2009 *Health Care Quality Report*.

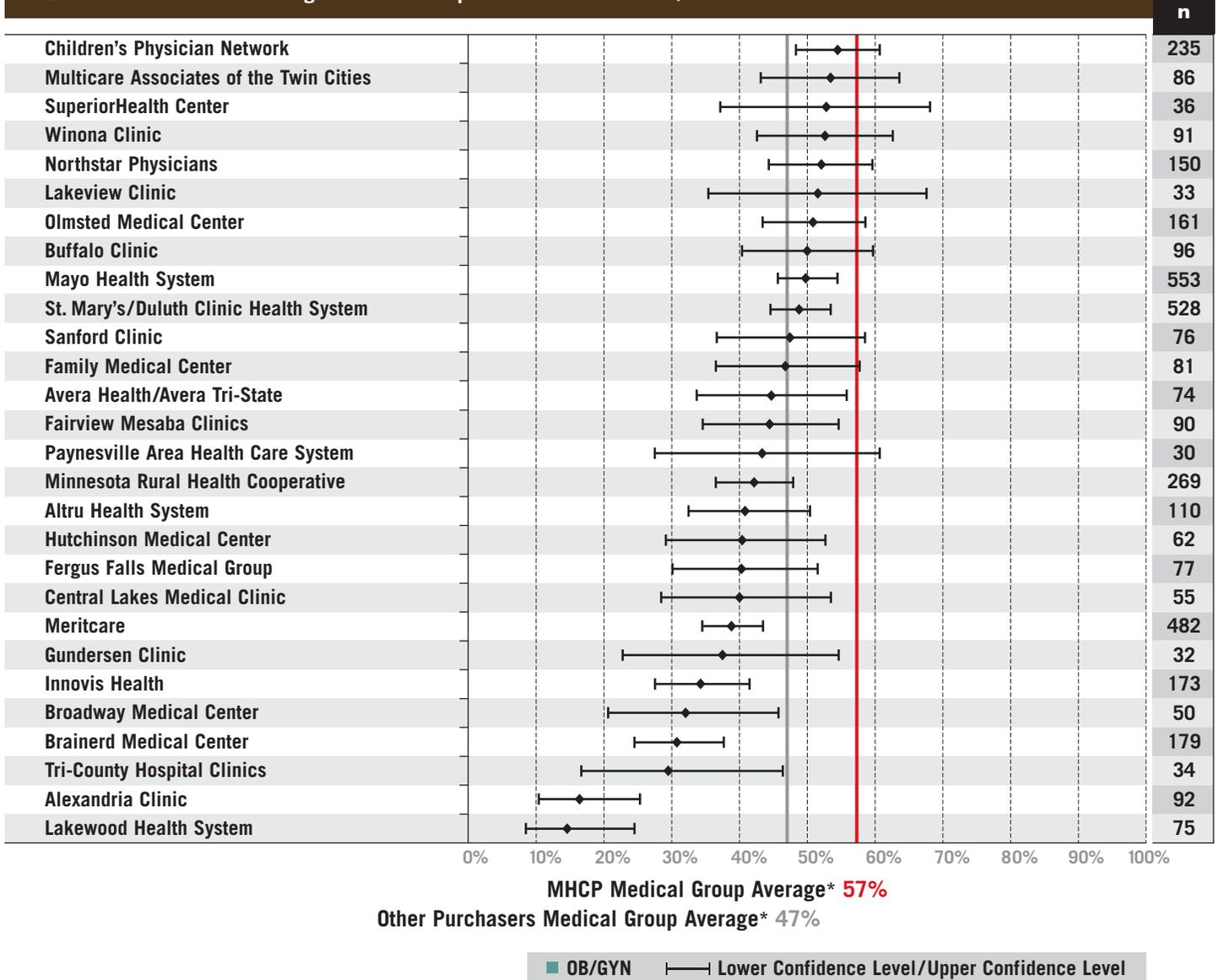
There was wide variation in the degree to which medical groups were successful in achieving this health care best practice with their MHCP patients. The most successful medical group, **Dr. Bobby K. Yang Medical Clinic**, achieved best practice with 90 percent of their MHCP patients, while the least successful medical group, **Lakewood Health System**, achieved it with only 15 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 11: Chlamydia Screening by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

**Chart 11: Chlamydia Screening by Medical Group – *continued***  
 (Minnesota Health Care Programs with 30+ patients in denominator)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Dr. Bobby K. Yang Medical Clinic had the highest Chlamydia Screening rate for MHCP patients at 90 percent. Ten medical groups had rates and confidence intervals that were fully above the medical group average of 57 percent for patients enrolled in MHCP:

- Dr. Bobby K. Yang Medical Clinic
- NorthPoint Health and Wellness Center
- Hennepin Faculty Associates & HCMC Clinics
- United Family Medicine
- HealthPartners Clinic
- HealthPartners Central Minnesota Clinics
- Neighborhood Health Care Network
- Allina Medical Clinic
- Park Nicollet Health Services
- Fairview Health Services

### Biggest Improvement

Not applicable due to changes in the measurement specifications.

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# “Staying Healthy” measures

## Childhood Immunization Status (Combo 3)

This measures the percentage of children two years of age who had the following vaccines by their second birthday:

- Four DTaP/DT
- Three IPV
- One MMR
- Two H influenza type B
- Three Hepatitis B
- One VZV (chicken pox)
- Four pneumococcal conjugate

The data for this measure are collected from health plan claims, the Minnesota Immunization Information Connection registry (MIIC) and medical record review.

MHCP patients have a significantly lower rate of Childhood Immunizations than patients enrolled with Other Purchasers ( $p < 0.05$ ). The MHCP statewide rate for Childhood Immunizations was 75 percent; the rate for Other Purchasers was 80 percent. Table 12 displays these statewide rates.

**Table 12: Statewide Weighted Rates\* for Childhood Immunization Status**

Purchasers	Statewide Weighted Rate*	95% CI	Denominator (Patients sampled)
MHCP	74.7%	73.2% - 76.1%	3,625
Other Purchasers	79.7%	77.8% - 81.4%	2,011

\* The statewide weighted rate includes all patients eligible for the measure (patients attributed to a medical group AND patients who could not be attributed to a medical group even though they received health care services).

Figure 12.1 displays the statewide rates over time. The rates for both purchasers have improved since 2006. The Childhood Immunization Status rates for MHCP patients have steadily improved each year. The rates for patients enrolled with Other Purchasers improved from 2006 to 2008, but the 2008 and 2009 rates remained the same.

The figure also includes the 2009 National HEDIS Medicaid and Commercial rates as benchmarks for comparison. The statewide rates for both MHCP patients and patients enrolled with Other Purchasers rates are both above their respective national HEDIS benchmarks.

**Figure 12.1 Childhood Immunization Status (Combo 3) statewide rates over time.**

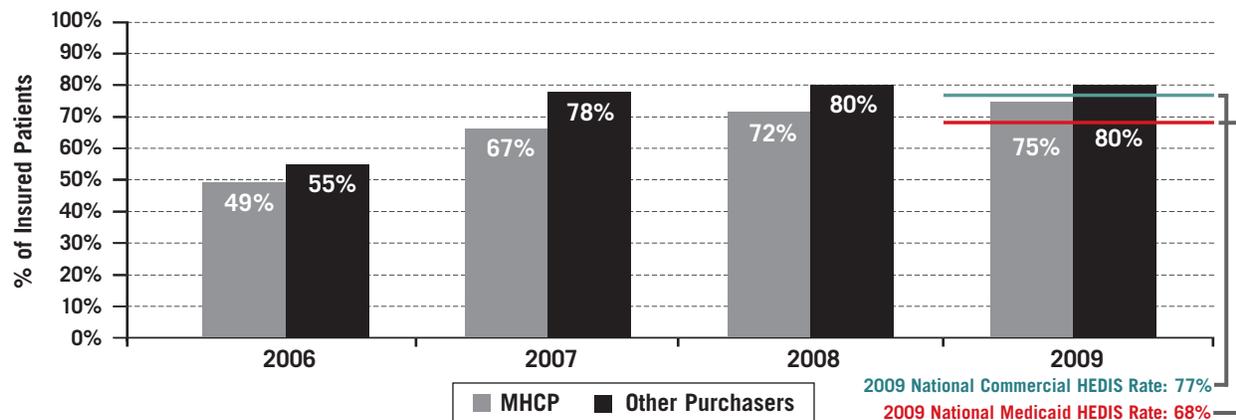
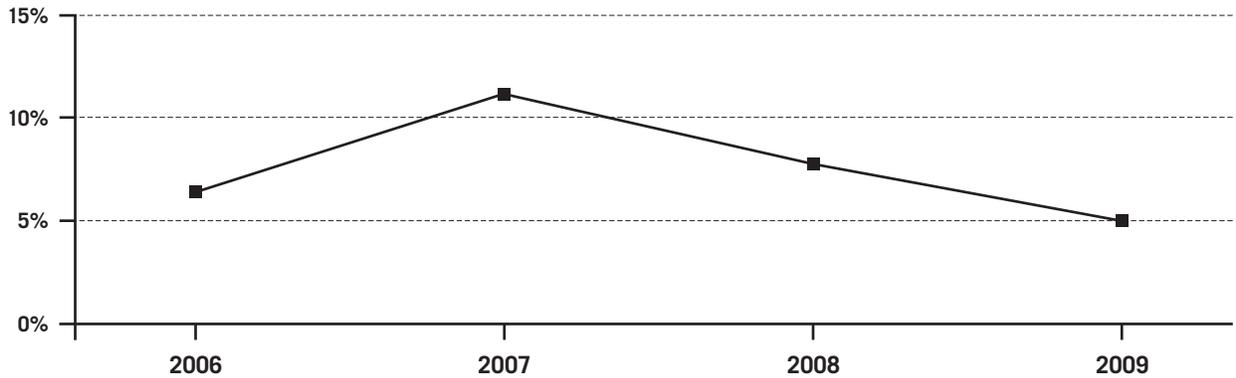


Figure 12.2 focuses on the gaps between purchasers over time. For the Childhood Immunization Status measure, the gap increased substantially from 2006 to 2007, but decreased since then. The gap between 2006 and 2009 is small.

**Figure 12.2 Childhood Immunization Status (Combo 3): Statewide Gaps between MHCP patients and patients enrolled with Other Purchasers by Year (Other Purchasers - MHCP)**

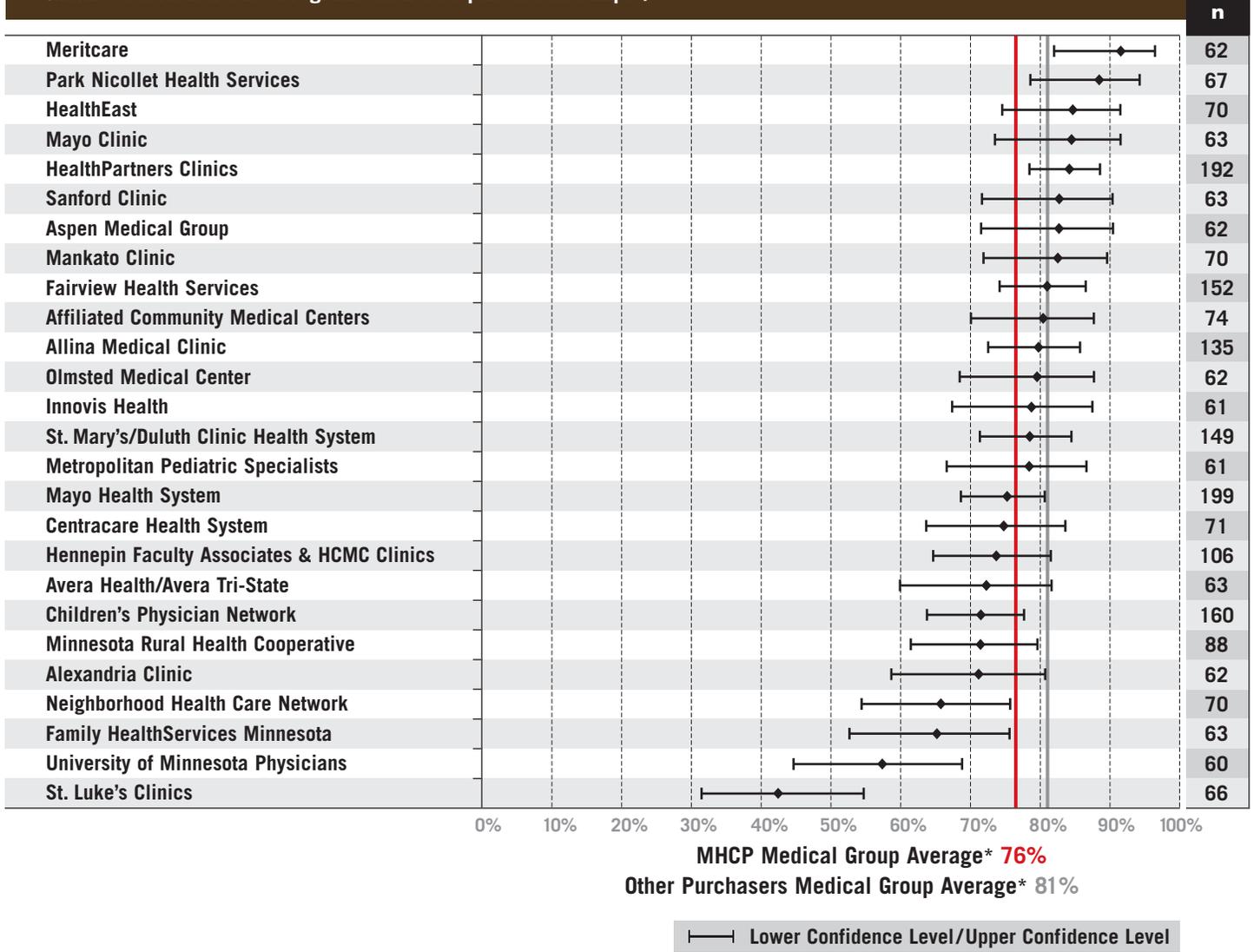


## Medical Group Performance Highlights

Chart 12 provides the Childhood Immunization Status MHCP rate by medical group from highest to lowest. It also includes the average medical group rates for MHCP and Other Purchasers. For the 2009 report year, 26 medical groups met the minimum threshold of at least 60 patients – a large enough sample to ensure a reasonable level of confidence in the reported rate. These 26 medical groups account for 2,351 of the 2,630 MHCP patients (89 percent) who were eligible for this measure statewide. The 26 medical groups account for 65 percent of medical groups reportable for this measure through MNCM’s *2009 Health Care Quality Report*.

The most successful medical group, **MeritCare**, achieved best practice with 92 percent of their MHCP patients, while the least successful medical group, **St. Luke’s Clinics**, achieved it with only 42 percent. A detailed table of medical group rates can be found in Appendix 3.

**Chart 12: Childhood Immunization Status by Medical Group**  
 (Minnesota Health Care Programs with 60+ patients in sample)



\*Medical group average includes ONLY those patients who were attributed to medical groups. This rate is used when comparing a single medical group to the performance of all medical groups. The medical group average may be slightly higher than the statewide average, because it includes patients who accessed care more frequently.

## Performance Highlights – Medical Group Level Results

### Medical Groups with Above Average MHCP Rates in Report Year 2009

Meritcare had the highest Childhood Immunization Status rate for MHCP patients at 92 percent. Three medical groups had rates and confidence intervals that were fully above the medical group average of 76 percent for patients enrolled in MHCP:

- Meritcare
- Park Nicollet Health Services
- HealthPartners Clinics

### Biggest Improvement from 2008-2009

The biggest improvement since report year 2008 in Childhood Immunization Status was made by Fairview Health Services, which achieved an 8 percentage point increase.

### Medical Group Performance Over Time (2007-2009)

Patterns of consistent improvement, consistent decreases, and relative stability are summarized below. A detailed table of medical group performance over time can be found in Appendix 4.

One medical group showed consistent improvement:

- Fairview Health Services

One medical group showed consistent decreases:

- Children's Physician Network

There were no medical groups with rates that were relatively stable.

Five medical groups did not have a discernable pattern.

## An Examination of Statewide Performance Rates by Race

A large body of literature documents disparities in the delivery of health care in the United States based on socioeconomic status, race and ethnicity; yet most existing performance measures have not been able to use data that take these characteristics into account. Race and ethnicity remain significant predictors of the quality of health care received even when accounting for socioeconomic conditions (IOM, 2003).

In Minnesota, results from our Disparities Reports have shown that patients of lower socioeconomic status have different rates of care even when health care coverage is available, as is the case for patients enrolled in MHCP. These disparities are the result of complex issues, one of which may be race. Researchers agree that collecting and using data on the race and ethnicity of a population may build a foundation for understanding and reducing disparities (AHIP, 2006; Lavizzo-Mourey, 2008). Our data now allow us to examine performance rate differences by race at a statewide level within the MHCP patient population, many of whom have lower socioeconomic status.

### Methods

Statewide comparisons by racial groups were conducted on the MHCP patient population utilizing enrollment data from the Minnesota Department of Human Services (DHS). DHS sends monthly enrollment data, which contain race and ethnicity data for MHCP patients, to participating health plans. Race and ethnicity information is voluntarily reported by the patient; that is, a patient may or may not indicate their race and/or ethnicity. Patients are also able to declare more than one race.

MNCM was only able to report on the first racial group identified since most health plans only retained the first racial group identified in the DHS enrollment data. Based on the information received from each health plan, each patient was placed in one of the following categories:

- American Indian or Alaskan Native
- Asian/Pacific-Islander/Native Hawaiian
- Black or African American
- Unknown
- White

This categorization generally complies with the Office of Management and Budget directive, although it combines Asian with Pacific-Islander/Native Hawaiian. One health plan combined these two categories in their coding scheme and was unable to disaggregate the categories.

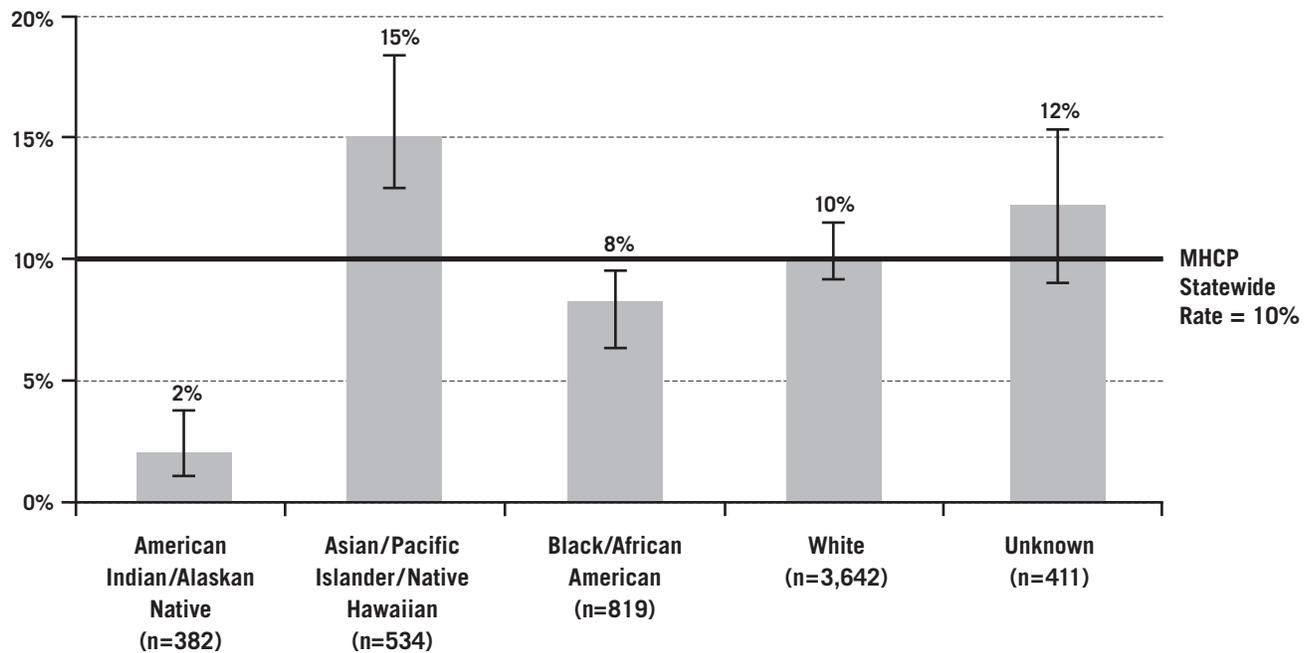
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## Results by Race

### Optimal Diabetes Care

Figure 13 shows the Optimal Diabetes Care rate by race. The Asian/Pacific Islander/Native Hawaiian group has the highest Optimal Diabetes Care rate and it is statistically significantly higher than any other racial group, with the exception of those with an Unknown racial status. It is also the only racial group with a performance rate that is significantly above the statewide MHCP rate (10 percent). The American Indian/Alaskan Native group has the lowest rate and it is significantly lower than any other racial group. There are two racial groups with performance rates significantly below the statewide MHCP rate – American Indian/Alaskan Native and Black/African American. Although the Black/African American group has a lower rate than the White racial group, their rates do not differ significantly.

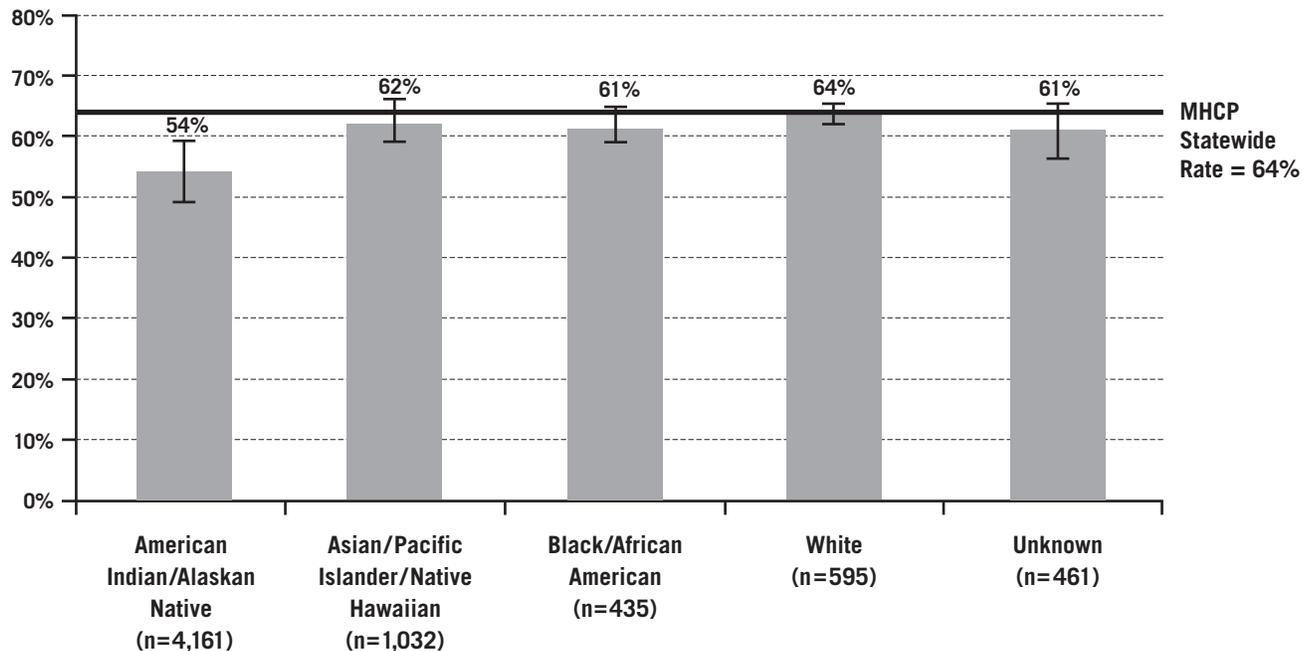
**Figure 13: Optimal Diabetes Care Statewide Rates by Race**



## Controlling High Blood Pressure

Figure 14 shows the Controlling High Blood Pressure rate by race. The White racial group has the highest rate, but it is statistically similar to all other racial groups except for the American Indian/Alaskan Native group. That group has the lowest rate of all racial groups but it is only significantly lower than the rate for the White racial group. There are no racial groups with a performance rate that is significantly above the statewide MHCP rate (64 percent). However, the American Indian/Alaskan Native racial group has a performance rate that is significantly below the statewide MHCP rate.

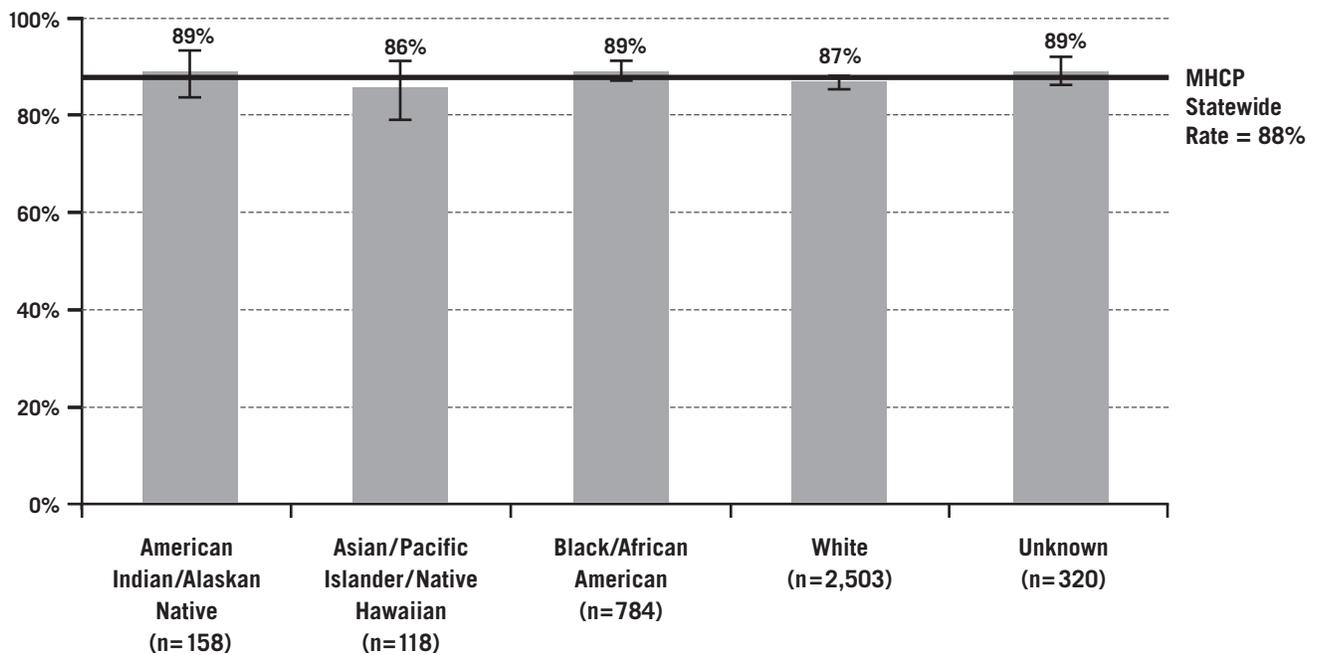
**Figure 14: Controlling High Blood Pressure Statewide Rates by Race**



## Appropriate Medications for People with Asthma

Figure 15 shows the Appropriate Medications for People with Asthma rates by race. All racial groups have reasonably high rates and all racial groups have statistically similar rates. There are no racial groups with performance rates that are significantly above or below the statewide MHCP rate (88 percent).

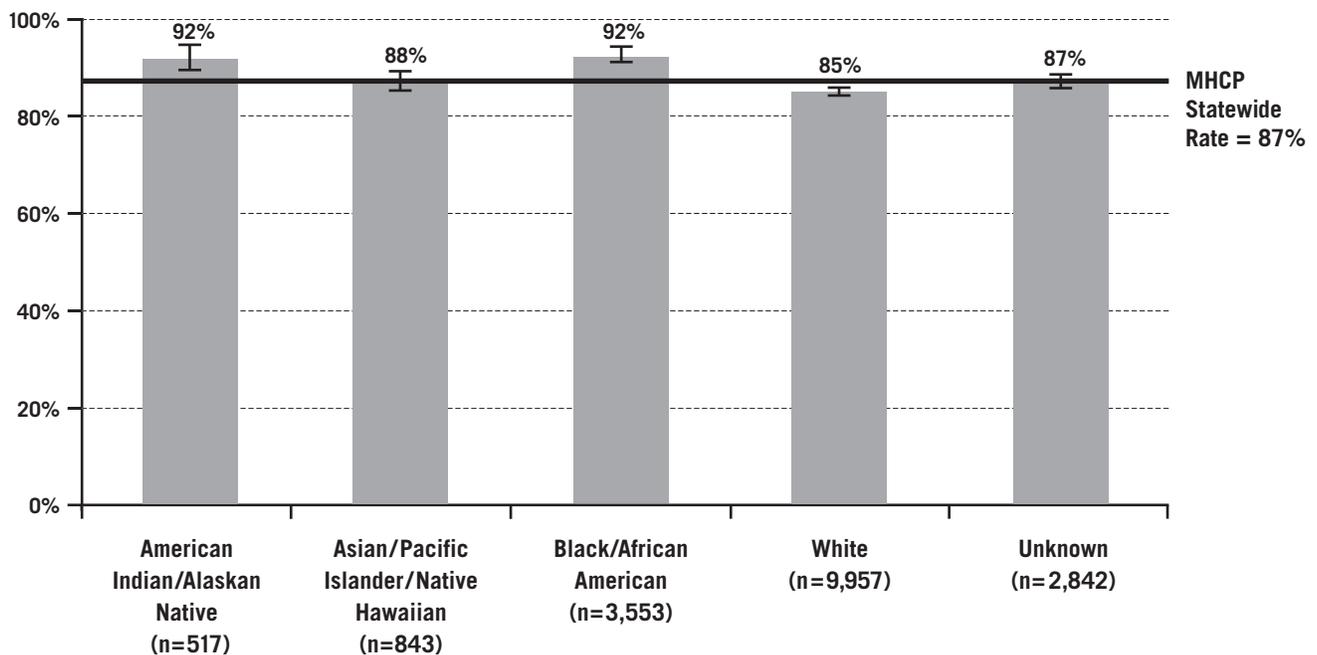
**Figure 15: Use of Appropriate Medications for People with Asthma (Ages 5-56)  
Statewide Rates by Race**



## Treatment for Children with Upper Respiratory Infection (URI)

Figure 16 shows these rates of Appropriate Treatment for Children with Upper Respiratory Infections by race. The Black/African American and American Indian racial groups have the highest rate of appropriate treatment for URI, and their rates are significantly above the statewide MHCP rate (87 percent). The White racial group has the lowest rate of appropriate treatment for URI, which is significantly lower than the two groups with the highest rate. It is also the only racial group with a performance rate that is significantly below the statewide MHCP rate. Although the White racial group has a lower rate of appropriate treatment for URI than the Asian racial group, they do not differ significantly.

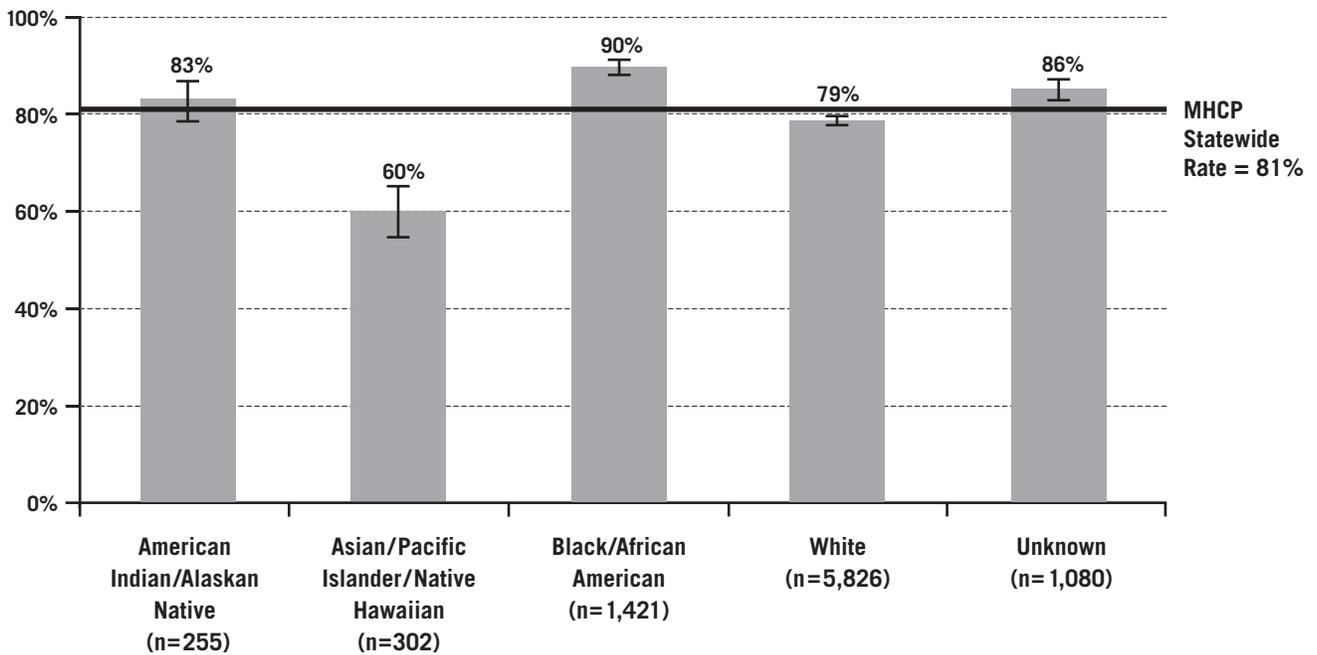
**Figure 16: Treatment for Children with URI Statewide Rates by Race**



## Testing for Children with Pharyngitis

Figure 17 shows the rates of Testing for Children with Pharyngitis by race. The Black/African American racial group has the highest rate of appropriate testing for Pharyngitis and it is significantly higher than any other racial group. It is also the only known racial group with a performance rate that is significantly above the statewide MHCP rate (81 percent). The Asian group has the lowest rate of testing for Pharyngitis and it is significantly lower than any other racial group. There are two racial groups with performance rates significantly below the statewide MHCP rate – Asian and White. Although the White racial group has a lower rate of testing for Pharyngitis than the American Indian racial group, they are statistically similar.

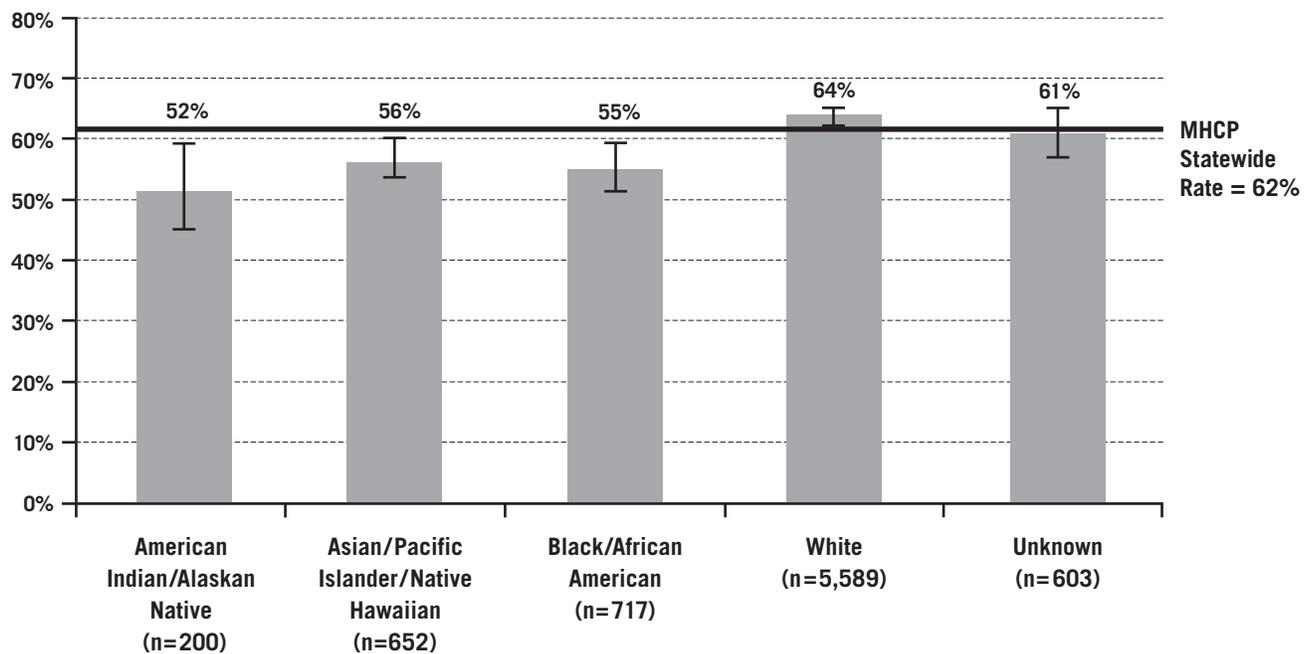
**Figure 17: Testing for Children with Pharyngitis Statewide Rates by Race**



## Breast Cancer Screening

Figure 18 shows the rates of Breast Cancer Screening by race. The White racial group has the highest Breast Cancer Screening rate and it is significantly higher than any other known racial group. The American Indian/Alaskan Native racial group has the lowest Breast Cancer Screening rate. Although it is statistically lower than the White racial group, it is statistically similar to the other racial groups. The White racial group is the only group with a performance rate that is significantly above the statewide MHCP rate (62 percent). There are three racial groups (Asian/Pacific Islander/Native Hawaiian, Black/African America, and American Indian/Alaskan Native) that are significantly below the statewide MHCP rate.

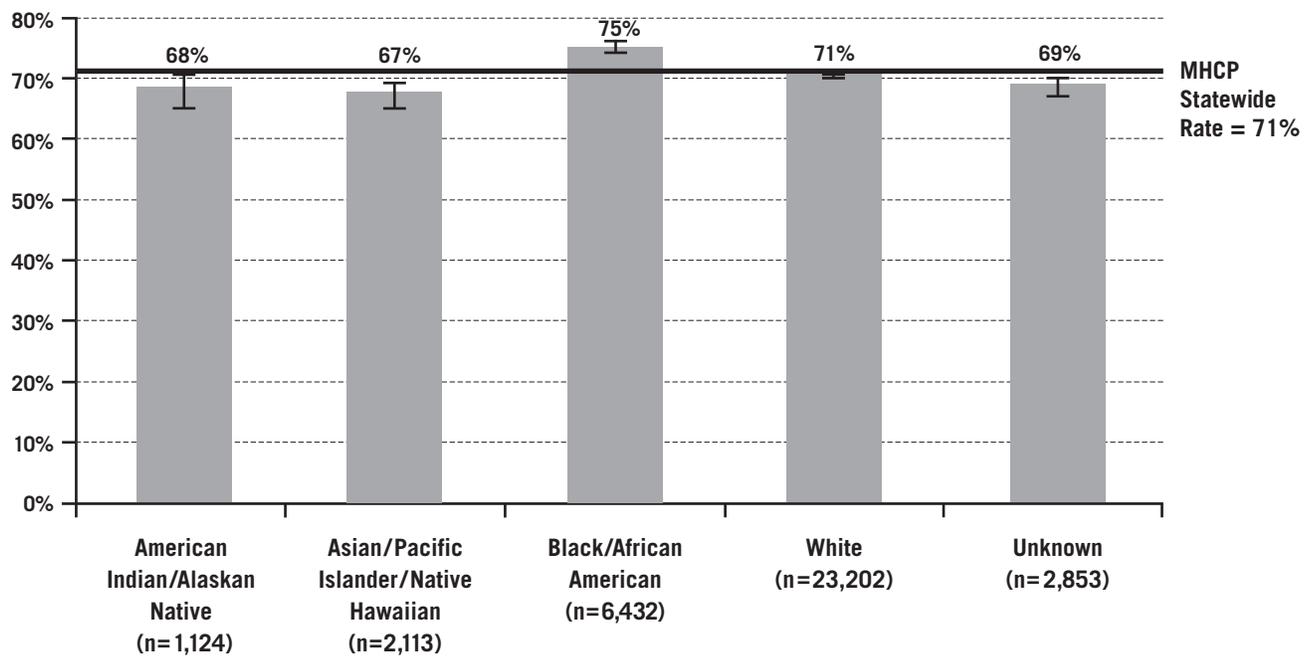
**Figure 18: Breast Cancer Screening Statewide Rates by Race**



## Cervical Cancer Screening

Figure 19 shows the rates of Cervical Cancer Screening by race. The Black/African American racial group has the highest Cervical Cancer Screening rate and it is significantly higher than any other racial group. It is also the only racial group with a performance rate that is significantly above the statewide MHCP rate (71 percent). The Asian racial group has the lowest Cervical Cancer Screening rate, and it is significantly lower than the Black/African American and White racial groups. Although it is lower than the American Indian racial group, they are not significantly different. There are two known racial groups (American Indian/Alaskan Native and Asian/Pacific Islander/Native Hawaiian) that are significantly below the statewide MHCP rate.

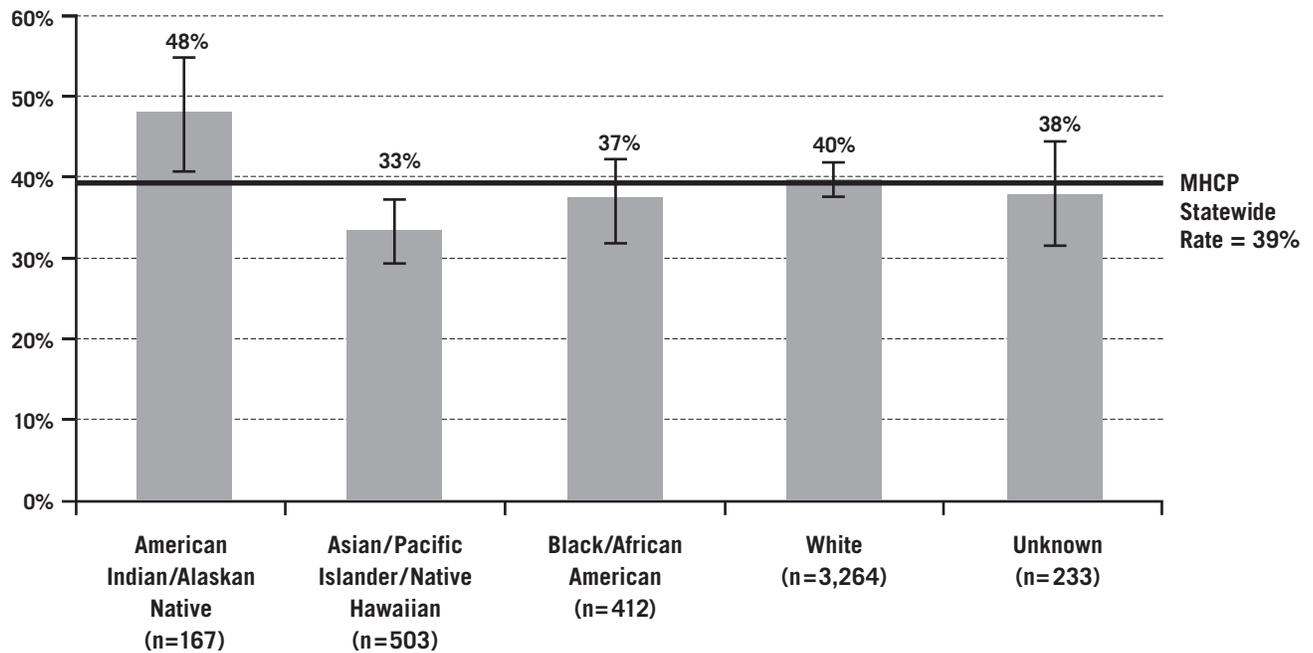
**Figure 19: Cervical Cancer Screening Statewide Rates by Race**



## Colorectal Cancer Screening

Figure 20 shows the rates of Colorectal Cancer Screening by race. The American Indian racial group has the highest Colorectal Cancer Screening rate and it is the only racial group with a performance rate that is significantly above the statewide MHCP rate (39 percent). The Asian racial group has the lowest Colorectal Cancer Screening rate. It is also the only racial group with a performance rate that is significantly below the statewide MHCP rate. This rate is significantly lower than the American Indian and White racial groups, but not significantly different from the Black/African American racial group and the Unknown category.

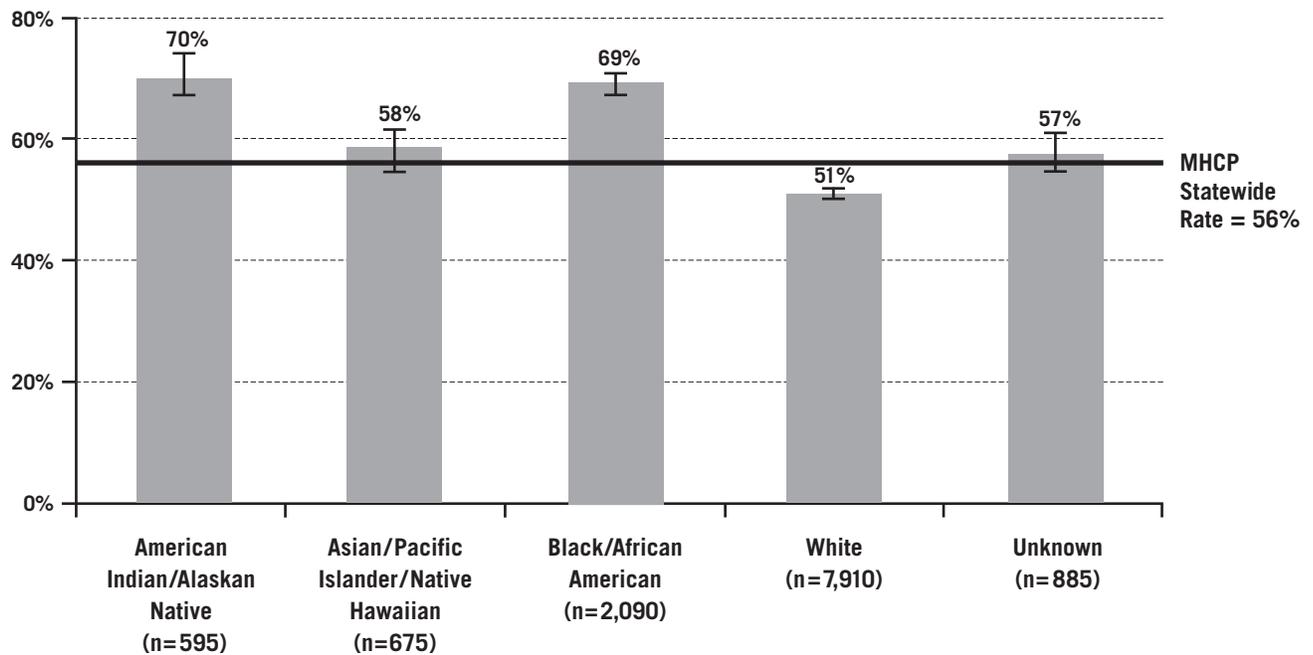
**Figure 20: Colorectal Cancer Screening Statewide Rates by Race**



## Chlamydia Screening

Figure 21 shows the rates of Chlamydia Screening by race. The American Indian/Alaskan Native racial group has the highest Chlamydia Screening rate, and while it is higher than the Black/African American rate, the rates for both racial groups are not significantly different. There are two racial groups (American Indian/Alaskan Native and Black/African American) with performance rates that are significantly above the statewide MHCP rate (56 percent). The White racial group has the lowest Chlamydia Screening rate, and it is significantly lower than all other racial groups. It is also the only racial group with a performance rate that is significantly below the statewide MHCP rate. The Asian racial group has significantly lower Chlamydia Screening rates than the American Indian and Black/African American racial groups, but significantly higher rates than the White racial group.

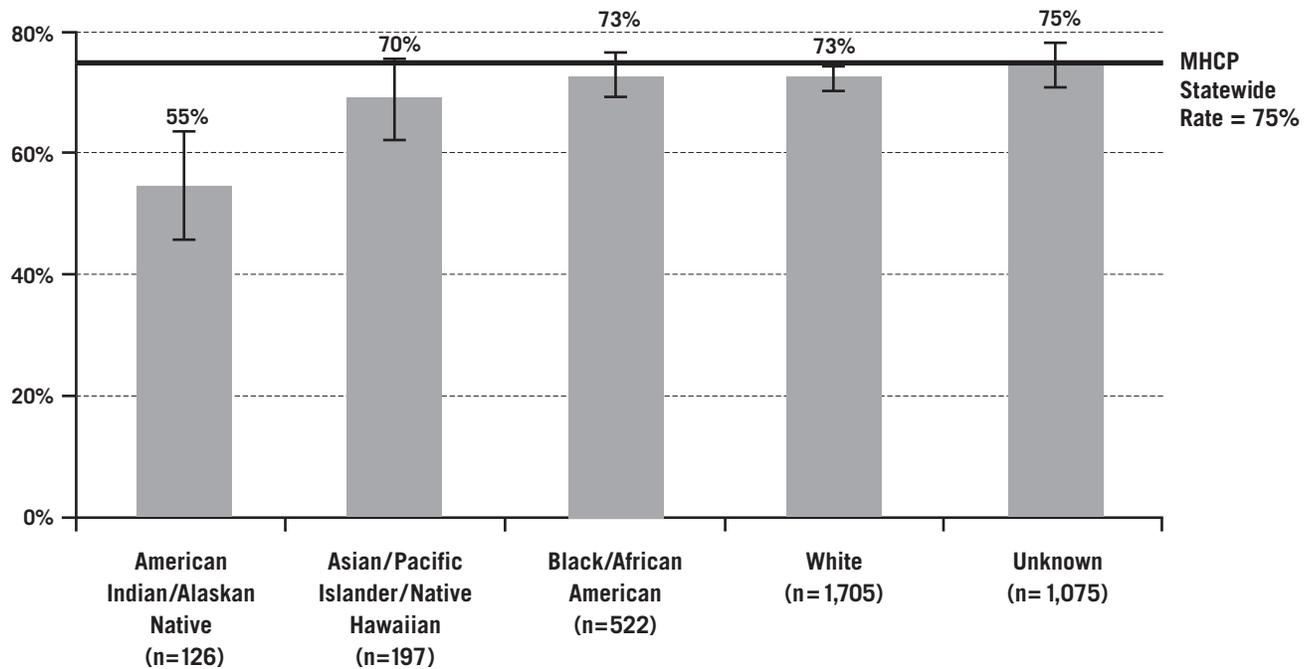
**Figure 21: Chlamydia Screening Statewide Rates by Race**



## Childhood Immunization Status

Figure 22 shows the rates of Childhood Immunization Status by race. The Unknown racial group has the highest Childhood Immunization Status rate followed closely by the Black/African American and White racial groups; these racial groups have statistically similar rates. There are no racial groups with performance rates that are significantly above the statewide MHCP rate (75 percent). The American Indian racial group has the lowest Childhood Immunization Status rate. It is also the only racial group with a performance rate that is significantly below the statewide MHCP rate. This rate is significantly lower than the Black/African American and White racial groups, but statistically similar to the Asian racial group.

**Figure 22: Childhood Immunization Status Statewide Rates by Race**



## Summary of Findings by Race

The results show that differences exist between racial groups within the MHCP patient population for all measures, although these differences are minimal for the Use of Appropriate Medications for People with Asthma. For the remaining nine measures, the difference by race comparing highest and lowest rate is statistically significant ( $p < 0.05$ ).

**Table 13: Summary of Findings by Racial Group**

Measures/Racial Group	American Indian/Alaskan Native	Asian/Pacific Islander/Native Hawaiian	Black/African American	White	Unknown
Optimal Diabetes Care	↓	↑	↓		
Controlling High Blood Pressure	↓				
Use of Appropriate Medications for People with Asthma					
Appropriate Treatment for Children with Upper Respiratory Infection	↑		↑	↓	
Appropriate Testing for Children with Pharyngitis		↓	↑	↓	↑
Breast Cancer Screening	↓	↓	↓	↑	
Cervical Cancer Screening	↓	↓	↑		↓
Colorectal Cancer Screening	↑	↓			
Chlamydia Screening	↑		↑	↓	
Childhood Immunization Status	↓				

↑ = Above MHCP Average    ↓ = Below MHCP Average    Blank = Similar to MHCP Average

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## Summary of Findings by Race

### **American Indian/Alaskan Native**

The American Indian/Alaskan Native racial group had the highest rate for four measures (Use of Appropriate Medications for People with Asthma, Treatment for Children with Upper Respiratory Infection, Colorectal Cancer Screening, Chlamydia Screening); and for four measures they had the lowest rate (Optimal Diabetes Care, Controlling High Blood Pressure, Breast Cancer Screening, Childhood Immunization Status).

In general, while there are rate differences between the American Indian/Alaskan Native racial group and other racial groups, for most measures this difference is not significant. There are no measures where the American Indian/Alaskan Native racial group is significantly higher than *all* other racial groups. The only measure where the American Indian/Alaskan Native racial group is significantly lower than *all* other racial groups is for the Optimal Diabetes Care measure.

### **Asian/Pacific Islander/Native Hawaiian**

For one measure (Optimal Diabetes Care), the Asian racial group had the highest rate; and for four measures they had the lowest rate (Use of Appropriate Medications for People with Asthma, Testing for Children with Pharyngitis, Cervical Cancer Screening, Colorectal Cancer Screening).

In general, while there are rate differences between the Asian racial group and other racial groups, for most measures this difference is not significant. The only measure where the Asian racial group is significantly higher than all other *known* racial groups is for Optimal Diabetes Care. The only measure where the Asian racial group is significantly lower than *all* other racial groups is for the Testing for Children with Pharyngitis.

### **Black/African American**

There are four measures where the Black/African American racial group had the highest rates (Use of Appropriate Medications for People with Asthma, Treatment for Children with Upper Respiratory Infection, Testing for Children with Pharyngitis, Cervical Cancer Screening). There were no measures where the Black/African American racial group had the lowest rate.

In general, while there are rate differences between the Black/African American racial group and other racial groups, for most measures this difference is not significant. The two measures where the Black/African American racial group is significantly higher than *all* other racial groups are the Testing for Children with Pharyngitis and Cervical Cancer Screening measures.

### **White**

For two measures, the White racial group had the highest rates (Controlling High Blood Pressure and Breast Cancer Screening); and for two other measures this racial group had the lowest rates (Treatment for Children with Upper Respiratory Infection and Chlamydia Screening).

In general, while there are rate differences between the White racial group and other racial groups, for most measures this difference is not significant. The only measure for which the White racial group is significantly higher than *all* other racial groups is Breast Cancer Screening, and the only measure for which it is significantly lower than *all* other racial groups is Chlamydia Screening.

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## Summary of Findings by Race

### Unknown

For one measure (Childhood Immunization), the Unknown category had the highest rate. There were no measures where the Unknown category had the lowest rate. For all measures, the rates between the Unknown category and other racial groups are similar.

### Limitations related to Race Data

This report includes statewide comparisons by racial group. Minimum reporting thresholds, necessary for comparisons by race within a medical group, were met only by an extremely small number of medical groups. In these cases, reporting on performance rates by race would not be appropriate. Therefore, reporting medical group performance rates by race would not be appropriate.

To be included in a measure, continuous enrollment criteria must be met. Continuous enrollment defines a sufficient timeframe during which a health care service could be performed. A shorter enrollment period makes it less likely for a health care service to be rendered and also makes it difficult for a health plan to respond to meet the needs of a patient. MHCP patients may have multiple interruptions in enrollment due to events such as the loss of MHCP eligibility. Therefore, MHCP patients who are represented in HEDIS measures are those with continuous enrollment and may not be reflective of the experience of a substantial proportion of MHCP patients. When performance rates are further calculated by race, as reported above for the MHCP population, the continuous enrollment criteria may impact some racial groups within a HEDIS measure more than others. It will be important for medical groups and clinics to be aware of the impact that continuous enrollment has on HEDIS measures in general and for each racial group. It would not be appropriate to assume that the MHCP rate applies equally to each racial group.

Race information is voluntarily reported by patients when they enroll in MHCP. The Minnesota Department of Human Services transmits this data monthly to the health plans that serve this population of patients. Although patients are able to declare more than one race on the MHCP enrollment form, most health plans retain only the first racial group transmitted because of data storage constraints. This means that within each of the distinct racial groups reported, there may be a portion of patients who are multi-racial. The reported performance rates by racial group may not only reflect the distinct racial group reported, and because of the data limitations, it was not possible to report performance rates for a separate multi-racial group.

It is also important to note that American Indian patients who are enrolled in MHCP may choose to receive some of their health care services such as preventive screenings from the Indian Health Service (IHS). IHS services are covered by the federal government instead of local health plans, so these services are not reflected in these data. This could be one explanation for why the rates for the American Indian racial group are low.

## Conclusion

The *2009 Health Care Disparities Report* highlights that many statewide MHCP rates have improved since last year and over time. Medical groups have begun to utilize results from our Health Care Disparities Reports and are implementing strategies to address the needs of their MHCP patient population. However, not of all the news is good. The Staying Healthy measures have not shown the same level of improvement as measures in the other categories. The three cancer screening measures have either remained flat or have shown significant declines since last year. And although the Childhood Immunization Status measure has increased, the improvement is not large enough to be significantly different since last year. This implies that medical groups must place more emphasis on ensuring that MHCP patients are receiving preventive care services. This will not only keep them healthy but offer the opportunity to identify disease at an early stage when it can be treated most effectively.

This report also highlights that gaps between MHCP and Other Purchasers are still present. The good news is that gaps between these purchaser groups have narrowed for seven measures. Unfortunately, gaps for two of the Living with Illness measures have actually widened (Optimal Diabetes Care and Controlling High Blood Pressure). Medical groups must take advantage of every opportunity to provide optimal care for diabetes and other chronic conditions among MHCP patients where the disease burden is disproportionately higher.

This is the first Health Care Disparities Report to report statewide MHCP results by racial group. Differences between racial groups were found for every measure. Within the MHCP patient population, performance rates for the African American racial group are not the lowest for any measure. In fact, their performance rates are the highest among all racial groups for four measures. In contrast, performance rates for the American Indian/Alaskan Native racial group are the lowest for four measures.

In addition, results from five measures indicate that one racial group is significantly different from all other racial groups:

- Optimal Diabetes Care – the American Indian/Alaskan Native racial group has a significantly lower rate than any other racial group.
- Testing for Children with Pharyngitis - the Asian group has a rate that is significantly lower than any other racial group.
- Breast Cancer Screening – the White racial group has a significantly higher rate than any other known racial group.
- Cervical Cancer Screening – the Black/African American racial group has a rate that is significantly higher than any other racial group.
- Chlamydia Screening - the White racial group has a rate that is significantly lower than any other racial group.

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## Conclusion

These results are provided at a statewide level, but they have important implications for medical groups and clinics. In order to move forward, we must find ways to utilize racial data when designing and planning quality improvement initiatives. The first step is to systematically collect race and other demographic information to better address the unique health care challenges faced by diverse patient populations. It may also be time to apply best practices in different ways that better address racial differences. For example, our data shows that the Colorectal Cancer Screening rate is significantly lower for the MHCP patient population compared to patients enrolled with Other Purchasers, and that among our MHCP patients, the African American racial group has the second lowest screening rate. We know that the incidence and mortality from colorectal cancer is higher for lower income populations and for African Americans. Guidelines are beginning to highlight this racial difference and now recommend colorectal cancer screening for African American patients starting at age 45. Developing an alert in the electronic medical record to remind physicians about this guideline recommendation will help achieve higher screening rates for their African American patients. At least one medical group has implemented this strategy and has seen improvements in their rates. We will drive change more quickly for the MHCP patient population when successes like this are widely shared and adopted.

## Future Plans

The *2009 Health Care Disparities Report* marks the third time that MNMCM and DHS have worked together to publicly report MHCP performance rates and to compare those rates with Other Purchasers. We examine the progress that has been made since the first report was issued and note that performance rates have improved – medical groups are more successfully achieving health care best practices with their MHCP patients. We also find that for some measures, the gap between MHCP patients and patients enrolled with Other Purchasers is narrowing, but unfortunately for other measures it is widening. It will be important to continue to report and monitor these rates annually to keep performance disparities visible to medical groups. This is the only public report that helps medical groups identify differences by purchaser category and compares them against their peers, and we have learned that many medical groups/clinics and other organizations such as health plans are using these results in their quality improvement efforts.

This also marks the first time that DHS and MNMCM have publicly reported statewide performance rates by race for 10 measures. Although the performance rates by race are not reported at a medical group level, we hope the statewide findings by race can help medical groups direct resources to address the racial disparities that may exist among their own MHCP patient populations.

Next year, we will calculate the Optimal Diabetes Care rate for the MHCP population using data submitted from medical groups through the MNMCM Direct Data Submission process. This will allow us, for the first time, to report performance rates for the MHCP patient population at the clinic level. In addition, the A1c component of the Optimal Diabetes Care measure will change from a value of less than seven to a value of less than eight to remain aligned with changes to clinical guidelines. We will also continue efforts to pursue data that will allow statewide reporting of performance rate by both race and ethnicity. Specifically, we hope to report performance rates for the Hispanic patient population, a growing demographic segment in Minnesota.

The Minnesota Department of Human Services and MN Community Measurement are committed to publicly reporting this information. We hope this *2009 Health Care Disparities Report* will continue to generate interest from the media, policy makers and others who can use this information to accelerate change. The goal is to substantially improve the health care that Minnesota's vulnerable patients receive. Publicly reporting these rates will not only accelerate improvement, it will also aid in eliminating performance rate differences by purchaser.

## Acknowledgements

Data management, performance assessment and report production are provided by MNCM, a community-based, nonprofit organization dedicated to accelerating the improvement of health in Minnesota and surrounding communities through measurement and public reporting of health care performance.

The ten health plans and county-based purchasing organizations that contributed data for this report are:

- Blue Cross and Blue Shield of Minnesota
- FirstPlan of Minnesota
- HealthPartners
- Medica
- Metropolitan Health Plan
- PreferredOne
- PrimeWest Health System
- Sanford Health Plan
- South Country Health Alliance
- UCare

Data aggregation and analysis are provided by associates of Data Intelligence, LLC, under subcontract with MN Community Measurement.

## Medical Groups (Primary Care) Reported in 2009 (76)

Affiliated Community Medical Centers	FamilyHealth Medical Clinics	North Memorial Clinic
Alexandria Clinic	Fergus Falls Medical Group	NorthPoint Health and Wellness Center
Allina Health System	Foley Medical Center	Northstar Physicians
Allina Medical Clinic	Gundersen Clinic	Northwest Family Physicians
Altru Health System	HealthEast	Olmsted Medical Center
Apple Valley Medical Clinic	HealthPartners Central	Park Nicollet Health Services
Aspen Medical Group	Minnesota Clinics	Paynesville Area Health Care System
Avera Health/Avera Tri-State	HealthPartners Clinics	Quello Clinic
Bloomington Lake Clinic	Hennepin Faculty Associates & HCMC Clinics	Ridgeview Clinics
Brainerd Medical Center	Hutchinson Medical Center	RiverView Clinics
Broadway Medical Center	Innovis Health	Riverwood Aitkin Clinic
Buffalo Clinic	Johnson Street Clinic	Sanford Clinic
Camden Physicians	Lakeview Clinic	Scenic Rivers Health Services
Cedar Riverside People's Center	Lakewood Health System	Silver Lake Clinic
CentraCare Health System	Mankato Clinic	St. Cloud Medical Group
Central Lakes Medical Clinic	Mayo Clinic	St. Joseph's Family Clinics
Children's Physician Network	Mayo Health System	St. Luke's Clinics
Columbia Park Medical Group	MeritCare	St. Mary's/Duluth Clinic Health System
Dr. Bobby K. Yang Medical Clinic	Metropolitan Pediatric Specialists	St. Paul Family Medical Center
Edina Family Physicians	Mid-Minnesota Family Medicine Center	Stillwater Medical Group
Fairview Health Services	Mille Lacs Clinics	SuperiorHealth Center
Fairview Mesaba Clinics	Minnesota Rural Health Cooperative	United Family Medicine
Family HealthServices Minnesota	Multicare Associates of the Twin Cities	Unity Family Healthcare - Avon
Family Medical Center	Neighborhood Health Care Network	University of Minnesota Physicians
Family Medicine of Winona	North Clinic	Tri-County Hospital Clinics
Family Practice Medical Center of Willmar		Winona Health Clinics

## Additional Provider Types Reported in 2009 (15)

### 8 Urgent/Convenience Care Clinics

Chaska Urgent Care	Now Care Medical Centers	Urgent Care Doctor's Office
Express Healthcare	Priority Pediatrics Urgent Care	WestHealth Urgent Care
MinuteClinic	Suburban Emergency Associates	

### 7 OB/GYN Clinics

John A. Haugen Associates	Northland OB/GYN Associates	OB/GYN & Infertility
Metropolitan OB/GYN Associates	Oakdale OB/GYN	Southdale OB/GYN Consultants
	Obstetrics & Gynecology Associates	

## Appendix 1: Data Sources and Data Collection

Data used for this report originated from health plan administrative claims databases and were supplemented by medical record review for hybrid measures. Most data elements were specified by the Healthcare Effectiveness Data and Information Set (HEDIS) *2009 Technical Specifications* (2008 dates of service). HEDIS is produced and maintained by the National Committee for Quality Assurance (NCQA). The technical specifications provided detailed steps and instructions to ensure that the submitted data met rigorous standards. Some data elements were specified by MNMCM and provided to the health plans.

The data elements were collected by the health plans using data collection and reporting standards that followed the annual HEDIS calendar. In addition, each health plan's data were subjected to extensive validation processes to ensure quality measures followed the standards described in *Volume 5, HEDIS Compliance Audit®: Standards, Policies and Procedures*. All health plan data were audited by an NCQA-certified HEDIS auditor.

MNMCM developed a Data Structure document with detailed steps and instructions to ensure that the submitted data met rigorous standards. In 2009, ten data sources – Blue Cross and Blue Shield of Minnesota, FirstPlan of Minnesota, HealthPartners, Medica, Metropolitan Health Plan, PreferredOne, PrimeWest Health System (county-based purchaser), Sanford Health Plan, South Country Health Alliance (county-based purchaser), and UCare – submitted data to MNMCM for purposes of public reporting. The submitted health plan data reflected patients/members enrolled in the following products: commercial HMO/POS/PPO, Medicare Cost, Medicare Risk, and Minnesota Health Care Programs (Prepaid Medical Assistance including dual eligibles, MinnesotaCare, General Assistance Medical Care). These data did not include patients who were uninsured, patients who were self-pay, or patients who were served by Medicaid/Medicare fee-for-service.

All data files were submitted to MNMCM for aggregation and validation. These processes were performed by an independent vendor under contract with MNMCM. Files were carefully reviewed to ensure conformance with the data structure and to identify unusual or unanticipated patterns. The files were also checked for proper formatting, missing and invalid values, and to confirm accurate record counts. Preliminary health plan rates were calculated and returned to each health plan for additional validation.

Once these validation checks were finalized, the data files from all ten health plans were aggregated to create a comprehensive data file of results by medical group. The aggregated data file was then checked for accurate record counts, and preliminary MNMCM rates were calculated. The preliminary rates were carefully reviewed by MNMCM staff and the data aggregation vendor. Particular attention was paid to notable changes from previous years at the statewide and medical group levels. After these checks were finalized, preliminary rates were compiled into the Health Care Disparities Report and sent to DHS and medical groups for review and comment. Any data concerns identified were reviewed to determine if the issues were related to the submitted data.

## Appendix 2: Methods

### Measures Reported

Two types of measures were reported at the medical group level – measures that used an administrative data only method and measures that used a hybrid method (administrative claims data plus medical record review). The following measures used the hybrid method:

- Optimal Diabetes Care
- Controlling High Blood Pressure
- Colorectal Cancer Screening
- Childhood Immunization Status (Combo 3)

The following measures used the administrative method:

- Use of Appropriate Medications for People with Asthma
- Appropriate Treatment for Children with Upper Respiratory Infection
- Appropriate Testing for Children with Pharyngitis
- Breast Cancer Screening
- Cervical Cancer Screening
- Chlamydia Screening

Each year, these measure specifications are reviewed against current evidence-based guidelines and input is sought from community experts. Measurement specifications for medical group level results were calculated using NCQA's 2009 HEDIS Technical Specifications along with MNMCM-specific numerator specifications for some measures.

### Eligible Population Specifications

The eligible populations for the administrative and hybrid measures are identified by each participating health plan utilizing its respective administrative databases. NCQA's 2009 HEDIS Technical Specifications provide the standard definitions for the eligible population for each measure, which include data elements such as age, continuous enrollment, and anchor date requirements.

Rates for measures using the administrative method were wholly derived from health plan claims data, while rates for measures using the hybrid method were derived from a combination of health plan claims data and medical record review data. For administrative measures, the entire eligible population was the denominator. For hybrid measures, the eligible population served as the sampling frame from which to draw the number of patients for chart audit and the reference for weighting.

### Patient Attribution to Medical Groups

Health plans assigned patients to a medical group using a frequency-based attribution logic and a standard medical group definition based on Tax Identification Numbers. Administrative billing codes identified the frequency of patient visits to medical groups. For most measures, patients were assigned to the medical group they visited most frequently during the measurement year. Patients who visited two or more medical groups with the same frequency were attributed to the medical group visited most recently. For two measures – Appropriate Testing for Children with Pharyngitis and Appropriate Treatment for Children with Upper Respiratory Infection – patients were assigned to the clinic they visited for the specific service.

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## Appendix 2: Methods

### Sampling for Hybrid Measures

As noted previously, the hybrid method required each participating health plan to first identify the eligible population of patients meeting measurement specifications using its administrative databases. This population of patients served as the sampling frame from which to draw the denominator (the patients for whom medical record review would be completed). The resource-intensive nature of medical record review necessitated a random sample of the eligible population. Medical record review was conducted for all enrollees drawn for the sample.

MNCM used a two-stage, random sampling process. This strategy was designed with statisticians to ensure reporting for the maximum number of medical groups while minimizing the impact of weighting on the results for any one medical group. The sampling procedure started with the health plans providing a data file containing a record for each eligible patient for each hybrid measure. This file also identified eligible patients that had been selected for the annual HEDIS sample. Additional patients were then selected from the remaining eligible population to meet MNMCM minimum reporting requirements.

### Numerator Specifications

For administrative measures, the numerator was the number of patients from the eligible population who met numerator targets. For hybrid measures, the numerator was the number of patients from the sample who met numerator targets.

### Weighting

Because data for hybrid measures were taken from a sample, results were weighted to obtain accurate rates. This allowed for aggregation and unbiased reporting by medical group. Weighting was a cost-saving measure that enabled MNMCM to draw a sample on which to estimate medical group and statewide rates. Weighting was applied to efficiently utilize health plan resources for data collection on a randomly sampled population.

Weights were calculated for each sampling stratum (i.e. health plan/health plan product/medical group). A weight was equal to the total eligible population for that stratum divided by the total sample size. In calculating rates for a population – medical group or statewide – the denominator was the sum of the weights for all patients in that population, and the numerator was the sum of the weights for patients in the population who met the numerator targets.

### Calculating Rates

Rates were expressed as percentages. They were calculated as 100 times the number who met the numerator targets divided by the number who were eligible for the measure. Rates calculated for measures using the administrative method were straightforward. However, rates calculated for measures using the hybrid method required weighting because of the sampling procedures. Rates and 95-percent-asymmetrical confidence intervals were calculated for each measure for each medical group. Asymmetrical confidence intervals were used to avoid confidence interval lower-bound values less than zero and upper bound values greater than one hundred.

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## Appendix 2: Methods

### Rates

Rates were calculated at both a statewide level and at a medical group level. Statewide rates included those patients attributed to a medical group AND those who could not be attributed to a medical group (i.e., all patients regardless of medical group affiliation). Medical group average rates included ONLY those patients who were attributed to medical groups. This rate was used when comparing a single medical group to the performance of all medical groups. The medical group average rate may be the same as or slightly higher than the statewide rate, because patients who could not be attributed to a medical group comprise a small number of patients.

### Limitations

The medical groups identified in this report did not represent all medical groups in Minnesota. MNMCM established minimum thresholds for public reporting to ensure statistically reliable rates. Only medical groups that met these thresholds were reported. Because hybrid measures are based on a sample, a minimum threshold of 60 patients per medical group was required to have a large enough sample to ensure a reasonable level of confidence in the reported rate. However, administrative measures are based on a complete census of managed care patients, so a minimum threshold of 30 patients per medical group was required. It should also be noted that medical groups reported for some measures may not have been reported for all measures.

Also, data used to calculate rates for these measures reflected patients insured through ten health plans. Medical groups with patients who were insured through other health plans, who were uninsured, who were self-pay, or who were served by a fee-for-service program were not reflected in these results. Therefore, the data for these measures did not necessarily represent a medical group's entire patient population.

Caution is recommended when making comparisons from year to year. Annual rate differences can occur due to natural variation, changes in measurement specifications, changes in data sources and other factors.

### Limitations/Implications of Using Continuous Enrollment Criteria with MHCP Patients

Continuous enrollment specifies the minimum amount of time that a person must be enrolled in a health plan before they are eligible for a measure. Continuous enrollment criteria are used by a health plan to ensure ample time for a person/patient to obtain health care services. The purpose is to standardize the method of patient inclusion in a measure across all health plans and medical groups. When used as part of a measurement tool, continuous enrollment defines a sufficient timeframe during which a health care service could be performed. A shorter enrollment period makes it less likely for a health care service to be rendered and also makes it difficult for a health plan to respond to the needs of a patient.

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## Appendix 2: Methods

Patients can have interruptions in enrollment with a health insurance plan. These interruptions are also referred to as “gaps in enrollment”. During a gap, a patient does not have health insurance coverage making it less likely for them to obtain health care services. Unfortunately, MHCP patients may have multiple interruptions in enrollment during a 12-month period due to events such as the loss of MHCP eligibility. For most HEDIS measures, a 45-day gap in enrollment allows a patient to be included in a measure, but a study of the Medicaid population in Oregon demonstrated that these patients often have gaps in enrollment that exceed 45 days (Howard et al, 2002). Therefore, Medicaid patients, including patients enrolled in MHCP, who are represented in HEDIS measures are those with continuous enrollment and may not be reflective of the experience of all Medicaid/MHCP patients. For some measures, such as Cervical Cancer Screening, HEDIS continuous enrollment specifications are appropriately adjusted so that more Medicaid patients are eligible for the measure.

When performance rates are further calculated by race for the MHCP population, the continuous enrollment criteria magnifies the concern about representation. A review by the Minnesota Department of Human Services showed that continuous enrollment criteria reduced the representation of some racial groups within a HEDIS measure and some measures were impacted more than others. When designing quality improvement interventions targeting specific patient populations, particularly projects based on race, it will be important for medical groups and clinics to be aware of the impact that continuous enrollment has on HEDIS measures in general and for each racial group. To work with a more representative population, an adjustment of the continuous enrollment criteria may be necessary depending on the measures selected.

### Data Analyses

#### Impact of Continuous Enrollment Criteria on MHCP Performance Rates

For each measure, we calculated both individual medical group rates and a medical group average rate of achievement of best practices for MHCP patients. We identified medical groups that achieved high performance by comparing the individual medical group rate with the medical group average. Medical groups that had rates and 95 percent confidence intervals that were fully above the medical group average were identified as high performers. These high performers were highlighted in the Results by Measure section for each measure. The performance rates for all medical groups were presented by performance rate in descending order in Appendix 3.

#### Impact of Continuous Enrollment Criteria on MHCP Performance Rates

For each measure, we compared individual medical group rates during report year 2009 with their rates during report year 2008, calculating an absolute percentage point difference. Medical groups with the largest percentage point increases were identified.

#### Medical Group Performance Over Time (3 years)

This analysis was done to determine patterns of medical group performance over time per measure. Patterns were reviewed for the three reporting years (2007, 2008 and 2009) since this *Health Care Disparities Report* was issued. See “Medical Group Performance over Time (2007-2009)” in the Results by Measure section and Appendix 4 for detailed tables of medical groups.

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## Appendix 2: Methods

Patterns in rate changes over the three reporting years (2007, 2008, and 2009) were reviewed. Only medical groups with rates for each of the three reporting periods per measure were included in the analysis. The percent and number of medical groups were reported for each of the following patterns of rate changes over the past three years for each measure:

- Consistently improved: Medical groups with more than a two percentage point increase between each consecutive year.
- Relatively stable: Medical groups that had no more than a two percentage point increase or decrease between each consecutive year (-2% – +2%).
- Consistently decreased: Medical groups with more than a two percentage point decrease between each consecutive year.
- Variable performance: Medical groups with an up/down pattern that was not consistent and did not fall into one of the other categories.

The performance for each medical group was analyzed using a pair-wise comparison between the first and last year. Statistical analysis was conducted using a general linear regression model with SASv9.1 (SAS Institute, Cary, NC) for each medical group. Statistical significance was designated at a p-value of less than 0.05.

### Analysis of Linear Trend

This analysis reviewed statewide gaps between purchasers (MHCP versus Other Purchasers) over time. Four measures with five or more years of data were examined for a linear trend in the difference between purchasers over time (Other Purchasers rate - MHCP rate). A linear trend was calculated for each measure using a general linear regression model with SASv9.1 (SAS Institute, Cary, NC). The following measures exhibited statistically significant trends ( $p < 0.05$ ).

- Optimal Diabetes Care (Figure 3.2)
- Use of Appropriate Medications for People with Asthma (Figure 5.2)
- Breast Cancer Screening (Figure 8.2)
- Cervical Cancer Screening (Figure 9.2)

## Appendix 3: Medical Group Performance Rate Tables

This section includes detailed tables per measure. The following elements are included in each table:

- Medical Group name in order of high rate to low rate.
- The total number of patients in the denominator for each measure (N).
- The medical group’s overall rate for each measure in their MHCP population.
- The lower and upper bounds of the 95% confidence interval.
- A rating that categorizes each medical group’s performance. An “Above” average rating is for medical groups that have an average and confidence interval that is fully above the overall medical group average for MHCP patients. An “Average” rating is for groups that have a confidence interval that includes the overall medical group average for MHCP patients. A “Below” average rating is for groups that have an average and confidence interval that is fully below the overall medical group average for MHCP patients.
- Total Population or Sample category which tells whether the rate was calculated using a sample of medical group’s MHCP population or a total population of a medical group’s MHCP patient population.

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**Table 1: Optimal Diabetes Care Rates by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in sample)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>10.2%</b>	<b>9.4%</b>	<b>11.1%</b>		
HealthEast	88	18.0%	11.4%	27.3%	Above	Sample
Allina Medical Clinic	283	17.2%	13.2%	22.0%	Above	Sample
Olmsted Medical Center	62	17.1%	9.7%	28.3%	Average	Sample
Allina Health System	72	17.0%	10.1%	27.3%	Average	Sample
Park Nicollet Health Services	222	16.1%	11.9%	21.5%	Above	Sample
HealthPartners Clinics	486	15.8%	12.8%	19.3%	Above	Sample
Mayo Clinic	99	15.1%	9.3%	23.4%	Average	Sample
Affiliated Community Medical Centers	92	14.7%	8.9%	23.4%	Average	Sample
University Of Minnesota Physicians	161	13.1%	8.8%	19.2%	Average	Sample
Fairview Health Services	266	12.8%	9.3%	17.3%	Average	Sample
Aspen Medical Group	60	11.8%	5.9%	22.4%	Average	Sample
Mayo Health System	268	11.0%	7.8%	15.3%	Average	Sample
Mankato Clinic	63	10.8%	5.3%	20.8%	Average	Sample
CentraCare Health System	78	10.7%	5.6%	19.5%	Average	Sample
Family HealthServices Minnesota	62	9.9%	4.7%	19.8%	Average	Sample
Meritcare	134	9.7%	5.8%	15.9%	Average	Sample
Minnesota Rural Health Cooperative	100	9.3%	5.0%	16.5%	Average	Sample
Innovis Health	77	7.7%	3.6%	15.9%	Average	Sample
Avera Health/Avera Tri-State	63	7.7%	3.3%	16.9%	Average	Sample
North Memorial Clinic	62	7.2%	3.0%	16.4%	Average	Sample
St. Mary's/Duluth Clinic Health System	213	7.0%	4.3%	11.2%	Average	Sample
Neighborhood Health Care Network	172	3.8%	1.8%	7.7%	Below	Sample
Northstar Physicians	88	2.9%	0.9%	8.8%	Below	Sample
Hennepin Faculty Associates & HCMC Clinics	316	2.9%	1.5%	5.3%	Below	Sample
St. Luke's Clinics	96	1.3%	0.3%	6.1%	Below	Sample
Altru Health System	63	0.0%	0.0%	5.8%	Below	Sample

**Table 2: Controlling High Blood Pressure Rates by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in sample)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>64.1%</b>	<b>62.9%</b>	<b>65.3%</b>		
Family HealthServices Minnesota	71	82.1%	71.6%	89.3%	Above	Sample
HealthEast	94	77.5%	68.1%	84.8%	Above	Sample
Park Nicollet Health Services	181	73.7%	66.8%	79.5%	Above	Sample
HealthPartners Clinics	486	73.5%	69.4%	77.2%	Above	Sample
CentraCare Health System	73	73.1%	62.0%	81.9%	Average	Sample
Buffalo Clinic	60	71.9%	59.5%	81.7%	Average	Sample
United Family Medicine	66	70.5%	58.7%	80.2%	Average	Sample
Allina Medical Clinic	331	70.4%	65.2%	75.0%	Above	Sample
Brainerd Medical Center	65	70.0%	58.0%	79.8%	Average	Sample
Mankato Clinic	67	69.9%	58.0%	79.5%	Average	Sample
Affiliated Community Medical Centers	91	69.8%	59.7%	78.3%	Average	Sample
Winona Clinic	69	68.9%	57.2%	78.6%	Average	Sample
Alexandria Clinic	68	68.8%	57.0%	78.5%	Average	Sample
St. Cloud Medical Group	68	68.4%	56.6%	78.2%	Average	Sample
St. Mary's/Duluth Clinic Health System	221	67.9%	61.5%	73.7%	Average	Sample
Mayo Health System	334	67.0%	61.8%	71.8%	Average	Sample
Central Lakes Medical Clinic	65	66.7%	54.6%	76.9%	Average	Sample
Olmsted Medical Center	74	65.7%	54.3%	75.5%	Average	Sample
Bloomington Lake Clinic, Ltd.	67	65.5%	53.6%	75.8%	Average	Sample
Sanford Clinic	68	64.1%	52.2%	74.5%	Average	Sample
Fairview Health Services	284	63.2%	57.5%	68.6%	Average	Sample
MeritCare	130	62.9%	54.4%	70.8%	Average	Sample

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**Table 2: Controlling High Blood Pressure Rates by Medical Group – *continued***  
 (Minnesota Health Care Programs with 60+ patients in sample)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>64.1%</b>	<b>62.9%</b>	<b>65.3%</b>		
Neighborhood Health Care Network	160	62.6%	54.9%	69.8%	Average	Sample
North Clinic	65	62.3%	50.2%	73.1%	Average	Sample
Minnesota Rural Health Cooperative	109	62.2%	52.8%	70.7%	Average	Sample
Northstar Physicians	98	62.1%	52.2%	71.1%	Average	Sample
University Of Minnesota Physicians	165	62.0%	54.4%	69.0%	Average	Sample
Allina Health System	77	60.9%	49.7%	71.0%	Average	Sample
St. Luke's Clinics	92	60.8%	50.6%	70.1%	Average	Sample
HealthPartners Central Minnesota Clinics	60	59.9%	47.2%	71.3%	Average	Sample
Family Medical Center	67	59.6%	47.6%	70.5%	Average	Sample
NorthPoint Health And Wellness Center	63	59.2%	46.8%	70.4%	Average	Sample
Aspen Medical Group	68	59.0%	47.1%	69.9%	Average	Sample
Hennepin Faculty Associates & HCMC Clinics	535	58.1%	53.9%	62.2%	Below	Sample
Avera Health/Avera Tri-State	75	56.7%	45.5%	67.3%	Average	Sample
North Memorial Clinic	65	55.7%	43.6%	67.1%	Average	Sample
Mayo Clinic	87	52.0%	41.7%	62.2%	Below	Sample
Broadway Medical Center	67	50.6%	38.9%	62.2%	Below	Sample
Altru Health System	70	50.1%	38.7%	61.5%	Below	Sample
Tri-County Hospital Clinics	66	49.7%	38.0%	61.5%	Below	Sample
Cedar Riverside People's Center	66	49.6%	37.9%	61.3%	Below	Sample
Fergus Falls Medical Group	67	47.1%	35.6%	58.8%	Below	Sample
Fairview Mesaba Clinics	60	42.0%	30.4%	54.6%	Below	Sample

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**Table 3.1: Asthma Care Rates by Medical Group - Ages 5-56**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>87.8%</b>	<b>86.7%</b>	<b>88.9%</b>		
Alexandria Clinic	38	97.4%	86.5%	99.5%	Average	Population
St. Cloud Medical Group	37	97.3%	86.2%	99.5%	Average	Population
Minnesota Rural Health Cooperative	85	94.1%	87.0%	97.5%	Average	Population
Children's Physician Network	344	93.9%	90.9%	96.0%	Above	Population
NorthPoint Health And Wellness Center	31	93.6%	79.3%	98.2%	Average	Population
Affiliated Community Medical Centers	68	92.7%	83.9%	96.8%	Average	Population
Mankato Clinic	35	91.4%	77.6%	97.0%	Average	Population
Neighborhood Health Care Network	101	91.1%	83.9%	95.2%	Average	Population
Mayo Health System	156	91.0%	85.5%	94.6%	Average	Population
HealthPartners Clinics	275	90.9%	86.9%	93.8%	Average	Population
Fairview Health Services	282	90.8%	86.8%	93.6%	Average	Population
Buffalo Clinic	32	90.6%	75.8%	96.8%	Average	Population
Hennepin Faculty Associates & HCMC Clinics	148	90.5%	84.8%	94.3%	Average	Population
Innovis Health	46	89.1%	77.0%	95.3%	Average	Population
Olmsted Medical Center	55	89.1%	78.2%	94.9%	Average	Population
Mayo Clinic	42	88.1%	75.0%	94.8%	Average	Population
Park Nicollet Health Services	119	87.4%	80.2%	92.2%	Average	Population
Allina Medical Clinic	282	87.2%	82.8%	90.6%	Average	Population
Family HealthServices Minnesota	46	87.0%	74.3%	93.9%	Average	Population
CentraCare Health System	60	86.7%	75.8%	93.1%	Average	Population
HealthEast	59	86.4%	75.5%	93.0%	Average	Population
University Of Minnesota Physicians	79	84.8%	75.3%	91.1%	Average	Population
MeritCare	120	84.2%	76.6%	89.6%	Average	Population
Aspen Medical Group	67	80.6%	69.6%	88.3%	Average	Population
Allina Health System	51	80.4%	67.5%	89.0%	Average	Population
Northstar Physicians	52	76.9%	63.9%	86.3%	Below	Population
St. Mary's/Duluth Clinic Health System	178	74.2%	67.3%	80.0%	Below	Population
St. Luke's Clinics	56	64.3%	51.2%	75.5%	Below	Population

**Table 3.2: Asthma Care Rates by Medical Group - Ages 5-17**  
 (Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>91.4%</b>	<b>90.0%</b>	<b>92.6%</b>		
Affiliated Community Medical Centers	35	97.1%	85.5%	99.5%	Average	Population
Minnesota Rural Health Cooperative	41	95.1%	83.9%	98.7%	Average	Population
Neighborhood Health Care Network	53	94.3%	84.6%	98.1%	Average	Population
Children's Physician Network	336	94.1%	91.0%	96.1%	Average	Population
Hennepin Faculty Associates & HCMC Clinics	83	94.0%	86.7%	97.4%	Average	Population
Mayo Health System	74	93.2%	85.1%	97.1%	Average	Population
HealthPartners Clinics	142	91.6%	85.8%	95.1%	Average	Population
Fairview Health Services	124	91.1%	84.8%	95.0%	Average	Population
Allina Medical Clinic	105	90.5%	83.4%	94.7%	Average	Population
Aspen Medical Group	31	90.3%	75.1%	96.7%	Average	Population
MeritCare	54	88.9%	77.8%	94.8%	Average	Population
CentraCare Health System	33	87.9%	72.7%	95.2%	Average	Population
Park Nicollet Health Services	54	87.0%	75.6%	93.6%	Average	Population
University Of Minnesota Physicians	37	86.5%	72.0%	94.1%	Average	Population
St. Mary's/Duluth Clinic Health System	75	84.0%	74.1%	90.6%	Below	Population

**Table 3.3: Asthma Care Rates by Medical Group - Ages 18-56**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>84.2%</b>	<b>82.4%</b>	<b>85.8%</b>		
Minnesota Rural Health Cooperative	44	93.2%	81.8%	97.7%	Average	Population
Fairview Health Services	158	90.5%	84.9%	94.2%	Above	Population
HealthPartners Clinics	133	90.2%	84.0%	94.2%	Average	Population
Mayo Health System	82	89.0%	80.4%	94.1%	Average	Population
Affiliated Community Medical Centers	33	87.9%	72.7%	95.2%	Average	Population
Innovis Health	33	87.9%	72.7%	95.2%	Average	Population
Park Nicollet Health Services	65	87.7%	77.6%	93.6%	Average	Population
Neighborhood Health Care Network	48	87.5%	75.3%	94.1%	Average	Population
Hennepin Faculty Associates & HCMC Clinics	65	86.2%	75.7%	92.5%	Average	Population
Allina Medical Clinic	177	85.3%	79.4%	89.8%	Average	Population
HealthEast	31	83.9%	67.4%	92.9%	Average	Population
University Of Minnesota Physicians	42	83.3%	69.4%	91.7%	Average	Population
Northstar Physicians	37	81.1%	65.8%	90.5%	Average	Population
MeritCare	66	80.3%	69.2%	88.1%	Average	Population
Allina Health System	39	76.9%	61.7%	87.4%	Average	Population
Aspen Medical Group	36	72.2%	56.0%	84.2%	Below	Population
St. Mary's/Duluth Clinic Health System	103	67.0%	57.4%	75.3%	Below	Population
St. Luke's Clinics	35	54.3%	38.2%	69.5%	Below	Population

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**Table 4: Appropriate Treatment for Children with Upper Respiratory Infection by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name (* = Urgent Care)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>87.1%</b>	<b>86.6%</b>	<b>87.6%</b>		
* Priority Pediatrics Urgent Care	35	100.0%	90.1%	100.0%	Above	Population
Columbia Park Medical Group	47	97.9%	88.9%	99.6%	Above	Population
* Suburban Emergency Associates	46	97.8%	88.7%	99.6%	Above	Population
Camden Physicians	37	97.3%	86.2%	99.5%	Average	Population
Hennepin Faculty Associates & HCMC Clinics	393	97.2%	95.1%	98.4%	Above	Population
Family Practice Medical Center Of Willmar	69	97.1%	90.0%	99.2%	Above	Population
HealthPartners Clinics	1,021	96.5%	95.2%	97.4%	Above	Population
NorthPoint Health And Wellness Center	105	96.2%	90.6%	98.5%	Above	Population
University Of Minnesota Physicians	397	95.7%	93.3%	97.3%	Above	Population
Children's Physician Network	1,416	95.6%	94.4%	96.6%	Above	Population
United Family Medicine	66	95.5%	87.5%	98.4%	Above	Population
North Memorial Clinic	181	95.0%	90.8%	97.4%	Above	Population
Gundersen Clinic	40	95.0%	83.5%	98.6%	Average	Population
Metropolitan Pediatric Specialists	118	94.9%	89.4%	97.7%	Above	Population
* WestHealth Urgent Care	57	94.7%	85.6%	98.2%	Average	Population
* Express Healthcare	74	94.6%	86.9%	97.9%	Average	Population
Hutchinson Medical Center	70	94.3%	86.2%	97.8%	Average	Population
Mille Lacs Clinics	68	94.1%	85.8%	97.7%	Average	Population
Mayo Clinic	330	93.9%	90.8%	96.0%	Above	Population
Stillwater Medical Group	49	93.9%	83.5%	97.9%	Average	Population
HealthEast	156	93.6%	88.6%	96.5%	Above	Population
Allina Health System	121	93.4%	87.5%	96.6%	Above	Population
* MinuteClinic	88	93.2%	85.9%	96.8%	Average	Population
Allina Medical Clinic	1,040	92.8%	91.1%	94.2%	Above	Population
Park Nicollet Health Services	627	92.7%	90.4%	94.5%	Above	Population
Neighborhood Health Care Network	337	92.6%	89.3%	94.9%	Above	Population
Aspen Medical Group	182	92.3%	87.5%	95.4%	Above	Population
Winona Clinic	175	92.0%	87.0%	95.2%	Average	Population
Buffalo Clinic	184	91.9%	87.0%	95.0%	Average	Population
* Urgent Care Doctor's Office	55	90.9%	80.4%	96.1%	Average	Population
St. Joseph's Family Clinics	96	90.6%	83.1%	95.0%	Average	Population
HealthPartners Central Minnesota Clinics	115	90.4%	83.7%	94.6%	Average	Population
Family HealthServices Minnesota	132	90.2%	83.9%	94.2%	Average	Population
MeritCare	572	90.0%	87.3%	92.2%	Above	Population
Northwest Family Physicians	60	90.0%	79.9%	95.3%	Average	Population

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**Table 4: Appropriate Treatment for Children with Upper Respiratory Infection by Medical Group – *continued***  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name (* = Urgent Care)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>87.1%</b>	<b>86.6%</b>	<b>87.6%</b>		
CentraCare Health System	238	89.9%	85.4%	93.1%	Average	Population
Fairview Health Services	1,148	89.9%	88.0%	91.5%	Above	Population
Affiliated Community Medical Centers	371	89.8%	86.3%	92.5%	Average	Population
Lakeview Clinic, Ltd.	80	88.8%	80.0%	94.0%	Average	Population
Northstar Physicians	132	87.9%	81.2%	92.4%	Average	Population
Quello Clinic	73	87.7%	78.2%	93.4%	Average	Population
St. Cloud Medical Group	89	87.6%	79.2%	93.0%	Average	Population
Family Medical Center	76	86.8%	77.5%	92.7%	Average	Population
Family Health Medical Clinics	30	86.7%	70.3%	94.7%	Average	Population
Fergus Falls Medical Group	110	86.4%	78.7%	91.6%	Average	Population
Mankato Clinic	251	86.1%	81.2%	89.8%	Average	Population
Riverwood Aitkin Clinic	50	86.0%	73.8%	93.1%	Average	Population
Sanford Clinic	149	85.9%	79.4%	90.6%	Average	Population
St. Mary's/Duluth Clinic Health System	503	85.5%	82.1%	88.3%	Average	Population
Fairview Mesaba Clinics	83	84.3%	75.0%	90.6%	Average	Population
Innovis Health	190	82.6%	76.6%	87.4%	Average	Population
Olmsted Medical Center	422	82.2%	78.3%	85.6%	Below	Population
MultiCare Associates Of The Twin Cities	95	82.1%	73.2%	88.5%	Average	Population
Lakewood Health System	134	79.9%	72.3%	85.8%	Below	Population
Mayo Health System	1,045	78.3%	75.7%	80.7%	Below	Population
Brainerd Medical Center	285	78.3%	73.1%	82.6%	Below	Population
Unity Family Healthcare - Avon	35	77.1%	61.0%	87.9%	Average	Population
Apple Valley Medical Clinic	52	76.9%	63.9%	86.3%	Below	Population
Minnesota Rural Health Cooperative	420	74.5%	70.2%	78.5%	Below	Population
Altru Health System	187	73.8%	67.1%	79.6%	Below	Population
Ridgeview Clinics	45	73.3%	59.0%	84.0%	Below	Population
St. Luke's Clinics	119	72.3%	63.6%	79.5%	Below	Population
Central Lakes Medical Clinic	64	71.9%	59.9%	81.4%	Below	Population
Paynesville Area Health Care System	42	69.1%	54.0%	80.9%	Below	Population
Tri-County Hospital Clinics	103	68.0%	58.4%	76.2%	Below	Population
Alexandria Clinic	74	66.2%	54.9%	76.0%	Below	Population
Riverview Clinics	84	58.3%	47.7%	68.3%	Below	Population
Broadway Medical Center	127	52.0%	43.4%	60.5%	Below	Population
Avera Health/Avera Tri-State	328	31.1%	26.3%	36.3%	Below	Population

**Table 5: Appropriate Testing for Children with Pharyngitis by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name (* = Urgent Care)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>80.7%</b>	<b>79.9%</b>	<b>81.5%</b>		
Multicare Associates Of The Twin Cities	83	98.8%	93.5%	99.8%	Above	Population
* Express Healthcare	69	98.6%	92.2%	99.7%	Above	Population
* WestHealth Urgent Care	44	97.7%	88.2%	99.6%	Above	Population
University Of Minnesota Physicians	82	97.6%	91.5%	99.3%	Above	Population
* Chaska Urgent Care	36	97.2%	85.8%	99.5%	Above	Population
* MinuteClinic	188	96.8%	93.2%	98.5%	Above	Population
Stillwater Medical Group	53	96.2%	87.3%	99.0%	Above	Population
HealthPartners Clinics	279	95.7%	92.6%	97.5%	Above	Population
HealthPartners Central Minnesota Clinics	61	95.1%	86.5%	98.3%	Above	Population
Hennepin Faculty Associates & HCMC Clinics	143	94.4%	89.4%	97.1%	Above	Population
Northstar Physicians	70	94.3%	86.2%	97.8%	Above	Population
Neighborhood Health Care Network	136	94.1%	88.8%	97.0%	Above	Population
Buffalo Clinic	63	93.7%	84.8%	97.5%	Above	Population
HealthEast	124	93.6%	87.8%	96.7%	Above	Population
Fairview Health Services	557	93.4%	91.0%	95.1%	Above	Population
Children's Physician Network	820	93.2%	91.2%	94.7%	Above	Population
Park Nicollet Health Services	337	92.6%	89.3%	94.9%	Above	Population
Aspen Medical Group	94	92.6%	85.4%	96.4%	Above	Population
Winona Clinic	62	91.9%	82.5%	96.5%	Above	Population
St. Cloud Medical Group	136	91.2%	85.2%	94.9%	Above	Population
Hutchinson Medical Center	32	90.6%	75.8%	96.8%	Average	Population
Northwest Family Physicians	32	90.6%	75.8%	96.8%	Average	Population
Apple Valley Medical Clinic	42	90.5%	77.9%	96.2%	Average	Population
Lakeview Clinic, Ltd.	44	88.6%	76.0%	95.1%	Average	Population
Allina Medical Clinic	408	87.3%	83.7%	90.2%	Above	Population
Quello Clinic	42	85.7%	72.2%	93.3%	Average	Population
Centracare Health System	110	85.5%	77.7%	90.8%	Average	Population
Olmsted Medical Center	187	84.5%	78.6%	89.0%	Average	Population
Allina Health System	68	83.8%	73.3%	90.7%	Average	Population

**Table 5: Appropriate Testing for Children with Pharyngitis by Medical Group – *continued***  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name (* = Urgent Care)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>80.7%</b>	<b>79.9%</b>	<b>81.5%</b>		
Paynesville Area Health Care System	39	82.1%	67.3%	91.0%	Average	Population
St. Luke's Clinics	53	81.1%	68.6%	89.4%	Average	Population
Meritcare	261	80.5%	75.2%	84.8%	Average	Population
Mankato Clinic	95	76.8%	67.4%	84.2%	Average	Population
Fergus Falls Medical Group	51	76.5%	63.2%	86.0%	Average	Population
Mayo Clinic	113	75.2%	66.5%	82.3%	Average	Population
Family HealthServices Minnesota	44	75.0%	60.6%	85.4%	Average	Population
Family Medical Center	76	72.4%	61.4%	81.2%	Average	Population
Sanford Clinic	45	71.1%	56.6%	82.3%	Average	Population
Affiliated Community Medical Centers	187	70.6%	63.7%	76.7%	Below	Population
Mayo Health System	626	69.0%	65.3%	72.5%	Below	Population
St. Mary's/Duluth Clinic Health System	151	68.9%	61.1%	75.7%	Below	Population
North Memorial Clinic	35	68.6%	52.0%	81.5%	Average	Population
Alexandria Clinic	62	67.7%	55.4%	78.1%	Below	Population
St. Joseph's Family Clinics	80	67.5%	56.6%	76.8%	Below	Population
Minnesota Rural Health Cooperative	281	67.3%	61.6%	72.5%	Below	Population
Brainerd Medical Center	219	66.7%	60.2%	72.6%	Below	Population
Unity Family Healthcare - Avon	42	66.7%	51.6%	79.0%	Below	Population
Innovis Health	131	63.4%	54.8%	71.1%	Below	Population
Wadena Medical Center	103	61.2%	51.5%	70.0%	Below	Population
Central Lakes Medical Clinic	39	59.0%	43.4%	72.9%	Below	Population
Broadway Medical Center	37	56.8%	40.9%	71.3%	Below	Population
Avera Health/Avera Tri-State	115	45.2%	36.4%	54.3%	Below	Population
Altru Health System	86	40.7%	30.9%	51.3%	Below	Population
Riverview Clinics	36	38.9%	24.8%	55.1%	Below	Population
Lakewood Health System	54	37.0%	25.4%	50.4%	Below	Population
Fairview Mesaba Clinics	39	35.9%	22.7%	51.6%	Below	Population
Riverwood Aitkin Clinic	35	34.3%	20.8%	50.9%	Below	Population

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**Table 6: Breast Cancer Screening by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>65.7%</b>	<b>64.5%</b>	<b>66.8%</b>		
Mayo Clinic	134	79.1%	71.5%	85.1%	Above	Population
Riverwood Aitkin Clinic	31	77.4%	60.2%	88.6%	Average	Population
Aspen Medical Group	112	75.9%	67.2%	82.9%	Above	Population
MultiCare Associates Of The Twin Cities	45	75.6%	61.3%	85.8%	Average	Population
HealthPartners Clinics	556	73.4%	69.6%	76.9%	Above	Population
St. Cloud Medical Group	48	72.9%	59.0%	83.4%	Average	Population
Park Nicollet Health Services	312	72.8%	67.6%	77.4%	Above	Population
Mayo Health System	335	72.5%	67.5%	77.0%	Above	Population
Olmsted Medical Center	100	72.0%	62.5%	79.9%	Average	Population
Alexandria Clinic	42	71.4%	56.4%	82.8%	Average	Population
NorthPoint Health And Wellness Center	42	71.4%	56.4%	82.8%	Average	Population
Avera Health/Avera Tri-State	59	71.2%	58.6%	81.2%	Average	Population
Hennepin Faculty Associates & HCMC Clinics	215	70.7%	64.3%	76.4%	Average	Population
Minnesota Rural Health Cooperative	174	70.1%	62.9%	76.4%	Average	Population
Family Medical Center	46	69.6%	55.2%	80.9%	Average	Population
Innovis Health	118	69.5%	60.7%	77.1%	Average	Population
Mankato Clinic	72	69.4%	58.1%	78.9%	Average	Population
Fergus Falls Medical Group	52	69.2%	55.7%	80.1%	Average	Population
Buffalo Clinic	39	69.2%	53.6%	81.4%	Average	Population
Sanford Clinic	38	68.4%	52.5%	80.9%	Average	Population
Central Lakes Medical Clinic	41	68.3%	53.0%	80.4%	Average	Population
North Memorial Clinic	62	67.7%	55.4%	78.1%	Average	Population
Fairview Health Services	502	67.5%	63.3%	71.5%	Average	Population
MeritCare	245	66.9%	60.8%	72.5%	Average	Population
Brainerd Medical Center	63	66.7%	54.4%	77.1%	Average	Population

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**Table 6: Breast Cancer Screening by Medical Group – *continued***  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>67.5%</b>	<b>64.5%</b>	<b>66.8%</b>		
Bloomington Lake Clinic, Ltd.	36	66.7%	50.3%	79.8%	Average	Population
Altru Health System	65	66.2%	54.0%	76.5%	Average	Population
St. Mary's/Duluth Clinic Health System	339	66.1%	60.9%	70.9%	Average	Population
Ridgeview Clinics	32	65.6%	48.3%	79.6%	Average	Population
CentraCare Health System	105	64.8%	55.3%	73.2%	Average	Population
North Clinic	48	64.6%	50.4%	76.6%	Average	Population
Fairview Mesaba Clinics	42	64.3%	49.2%	77.0%	Average	Population
United Family Medicine	47	63.8%	49.5%	76.0%	Average	Population
Allina Medical Clinic	491	63.5%	59.2%	67.7%	Average	Population
Lakewood Health System	51	62.8%	49.0%	74.7%	Average	Population
Affiliated Community Medical Centers	130	62.3%	53.7%	70.2%	Average	Population
HealthEast	112	60.7%	51.5%	69.3%	Average	Population
Family HealthServices Minnesota	115	60.0%	50.9%	68.5%	Average	Population
Winona Clinic	35	60.0%	43.6%	74.5%	Average	Population
Allina Health System	100	59.0%	49.2%	68.1%	Average	Population
Tri-County Hospital Clinics	39	59.0%	43.4%	72.9%	Average	Population
Stillwater Medical Group	36	58.3%	42.2%	72.9%	Average	Population
Northstar Physicians	115	54.8%	45.7%	63.6%	Below	Population
St. Luke's Clinics	119	54.6%	45.7%	63.3%	Below	Population
SuperiorHealth Center	39	53.9%	38.6%	68.4%	Average	Population
St. Joseph's Family Clinics	36	52.8%	37.0%	68.0%	Average	Population
University Of Minnesota Physicians	179	50.8%	43.6%	58.1%	Below	Population
Neighborhood Health Care Network	189	50.8%	43.7%	57.8%	Below	Population
Hutchinson Medical Center	33	42.4%	27.2%	59.2%	Below	Population
Cedar Riverside People's Center	31	41.9%	26.4%	59.2%	Below	Population

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**Table 7: Cervical Cancer Screening by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name (* = Urgent Care, ■ = OB/GYN)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>74.3%</b>	<b>73.8%</b>	<b>74.7%</b>		
■ John A. Haugen Assoc.	41	100.0%	91.4%	100.0%	Above	Population
■ Southdale OB/GYN Consultants	39	100.0%	91.0%	100.0%	Above	Population
■ Northland Ob-Gyn Assoc.	47	97.9%	88.9%	99.6%	Above	Population
■ OB/GYN & Infertility	43	97.7%	87.9%	99.6%	Above	Population
■ Obstetrics & Gynecology Associates	62	95.2%	86.7%	98.3%	Above	Population
■ Metropolitan OB/GYN	40	95.0%	83.5%	98.6%	Above	Population
■ Oakdale OB/GYN	70	91.4%	82.5%	96.0%	Above	Population
Edina Family Physicians	37	83.8%	68.9%	92.4%	Average	Population
HealthPartners Central Minnesota Clinics	251	82.9%	77.7%	87.0%	Above	Population
Lakeview Clinic, Ltd.	116	82.8%	74.9%	88.6%	Above	Population
Family Practice Medical Center Of Willmar	52	82.7%	70.3%	90.6%	Average	Population
Silver Lake Clinic	52	82.7%	70.3%	90.6%	Average	Population
Fairview Health Services	2,700	79.4%	77.8%	80.9%	Above	Population
Aspen Medical Group	539	79.0%	75.4%	82.3%	Above	Population
Mankato Clinic	405	79.0%	74.8%	82.7%	Above	Population
Unity Family Healthcare - Avon	38	79.0%	63.7%	88.9%	Average	Population
Buffalo Clinic	265	78.9%	73.6%	83.4%	Average	Population
MultiCare Associates Of The Twin Cities	276	78.6%	73.4%	83.1%	Average	Population
HealthPartners Clinics	3,481	78.3%	76.9%	79.7%	Above	Population
Park Nicollet Health Services	1,818	78.3%	76.3%	80.1%	Above	Population
CentraCare Health System	540	78.2%	74.5%	81.4%	Above	Population
SuperiorHealth Center	123	78.1%	70.0%	84.5%	Average	Population
NorthPoint Health And Wellness Center	308	77.9%	73.0%	82.2%	Average	Population
Bloomington Lake Clinic, Ltd.	178	77.0%	70.3%	82.5%	Average	Population
North Memorial Clinic	353	76.5%	71.8%	80.6%	Average	Population
Northwest Family Physicians	122	76.2%	68.0%	82.9%	Average	Population
Allina Medical Clinic	2,600	75.4%	73.7%	77.0%	Average	Population
St. Mary's/Duluth Clinic Health System	1,809	74.9%	72.8%	76.8%	Average	Population
Camden Physicians	99	74.8%	65.4%	82.3%	Average	Population
North Clinic	194	74.7%	68.2%	80.3%	Average	Population
Allina Health System	663	74.7%	71.2%	77.8%	Average	Population
Sanford Clinic	114	73.7%	64.9%	80.9%	Average	Population
Quello Clinic	163	73.6%	66.4%	79.8%	Average	Population
Broadway Medical Center	83	73.5%	63.1%	81.8%	Average	Population
HealthEast	701	73.5%	70.1%	76.6%	Average	Population
United Family Medicine	316	73.4%	68.3%	78.0%	Average	Population
University Of Minnesota Physicians	1,186	73.4%	70.8%	75.8%	Average	Population
Family Medicine Of Winona	30	73.3%	55.6%	85.8%	Average	Population
St. Cloud Medical Group	154	72.7%	65.2%	79.1%	Average	Population
Hennepin Faculty Associates & HCMC Clinics	999	72.7%	69.8%	75.4%	Average	Population

\*Patients attributed to this entity receive the majority of their annual health care at this entity. These patients are less likely to receive primary care services when they seek care at one of these entities.

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**Table 7: Cervical Cancer Screening by Medical Group – *continued***  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name (* = Urgent Care, ■ = OB/GYN)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>74.3%</b>	<b>73.8%</b>	<b>74.7%</b>		
MeritCare	795	72.6%	69.4%	75.6%	Average	Population
Northstar Physicians	485	72.6%	68.4%	76.4%	Average	Population
Paynesville Area Health Care System	65	72.3%	60.4%	81.7%	Average	Population
Alexandria Clinic	126	72.2%	63.8%	79.3%	Average	Population
St. Luke's Clinics	521	72.0%	68.0%	75.7%	Average	Population
Altru Health System	164	72.0%	64.6%	78.3%	Average	Population
Winona Clinic	81	71.6%	61.0%	80.3%	Average	Population
Family HealthServices Minnesota	368	71.5%	66.7%	75.8%	Average	Population
Mayo Health System	1,347	71.2%	68.7%	73.6%	Below	Population
Apple Valley Medical Clinic	62	71.0%	58.7%	80.8%	Average	Population
Affiliated Community Medical Centers	270	70.4%	64.7%	75.5%	Average	Population
Neighborhood Health Care Network	1,102	70.3%	67.6%	73.0%	Below	Population
Riverwood Aitkin Clinic	114	70.2%	61.2%	77.8%	Average	Population
Hutchinson Medical Center	100	70.0%	60.4%	78.1%	Average	Population
St. Paul Family Medical Center	56	69.6%	56.7%	80.1%	Average	Population
Olmsted Medical Center	335	69.6%	64.4%	74.2%	Below	Population
Stillwater Medical Group	149	69.1%	61.3%	76.0%	Average	Population
Mayo Clinic	285	69.1%	63.5%	74.2%	Below	Population
Mille Lacs Clinics	64	68.8%	56.6%	78.8%	Average	Population
Fairview Mesaba Clinics	262	68.7%	62.9%	74.0%	Below	Population
Family Medical Center	190	68.4%	61.5%	74.6%	Average	Population
Lakewood Health System	237	68.4%	62.2%	73.9%	Below	Population
Innovis Health	268	67.5%	61.7%	72.9%	Below	Population
Minnesota Rural Health Cooperative	442	67.0%	62.5%	71.2%	Below	Population
Mid Minnesota Family Medicine Center	142	66.9%	58.8%	74.1%	Below	Population
Tri-County Hospital Clinics	97	66.0%	56.1%	74.6%	Average	Population
Fergus Falls Medical Group	144	66.0%	57.9%	73.2%	Below	Population
Central Lakes Medical Clinic	175	65.7%	58.4%	72.3%	Below	Population
Gundersen Clinic	32	65.6%	48.3%	79.6%	Average	Population
Scenic Rivers Health Services	58	65.5%	52.7%	76.4%	Average	Population
Ridgeview Clinics	129	65.1%	56.6%	72.8%	Below	Population
Brainerd Medical Center	370	64.1%	59.0%	68.8%	Below	Population
* MinuteClinic	38	63.2%	47.3%	76.6%	Average	Population
Avera Health/Avera Tri-State	91	62.6%	52.4%	71.9%	Below	Population
Foley Medical Center	39	59.0%	43.4%	72.9%	Below	Population
Cedar Riverside People's Center	127	58.3%	49.6%	66.5%	Below	Population
* Now Care Medical Centers	39	48.7%	33.9%	63.8%	Below	Population
Johnson Street Clinic	35	48.6%	33.0%	64.4%	Below	Population
St. Joseph's Family Clinics	110	48.2%	39.1%	57.4%	Below	Population

\*Patients attributed to this entity receive the majority of their annual health care at this entity. These patients are less likely to receive primary care services when they seek care at one of these entities.

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**Table 8: Colorectal Cancer Screening by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in denominator)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>41.8%</b>	<b>40.3%</b>	<b>43.3%</b>		
Mayo Clinic	80	63.1%	52.1%	72.8%	Above	Sample
Minnesota Rural Health Cooperative	70	61.6%	49.9%	72.1%	Above	Sample
Mayo Health System	225	60.4%	53.9%	66.5%	Above	Sample
MeritCare	68	56.7%	44.9%	67.8%	Above	Sample
HealthPartners Clinics	234	53.3%	46.9%	59.6%	Above	Sample
St. Cloud Medical Group	66	52.9%	41.0%	64.5%	Average	Sample
Park Nicollet Health Services	106	52.6%	43.2%	61.8%	Above	Sample
CentraCare Health System	64	51.1%	39.2%	63.0%	Average	Sample
St. Luke's Clinics	86	48.8%	38.5%	59.1%	Average	Sample
Allina Medical Clinic	122	48.3%	39.7%	57.1%	Average	Sample
Hennepin Faculty Associates & HCMC Clinics	263	48.1%	42.1%	54.1%	Above	Sample
Fairview Health Services	146	46.2%	38.3%	54.3%	Average	Sample
Mankato Clinic	65	46.2%	34.6%	58.2%	Average	Sample
Family Medical Center	66	45.3%	33.9%	57.2%	Average	Sample
St. Mary's/Duluth Clinic Health System	133	44.9%	36.7%	53.4%	Average	Sample
Olmsted Medical Center	66	44.2%	32.8%	56.1%	Average	Sample
Avera Health/Avera Tri-State	64	43.7%	32.2%	55.8%	Average	Sample
Neighborhood Health Care Network	65	40.3%	29.3%	52.4%	Average	Sample
Affiliated Community Medical Centers	66	40.1%	29.1%	52.1%	Average	Sample
University Of Minnesota Physicians	66	39.6%	28.6%	51.6%	Average	Sample
HealthEast	66	35.0%	24.6%	47.0%	Average	Sample
North Clinic	66	32.2%	22.1%	44.1%	Average	Sample
Brainerd Medical Center	67	32.0%	22.1%	43.9%	Average	Sample
Family HealthServices Minnesota	66	31.3%	21.4%	43.3%	Average	Sample
Northstar Physicians	60	30.6%	20.4%	43.1%	Average	Sample
Aspen Medical Group	66	30.2%	20.5%	42.1%	Average	Sample
Innovis Health	67	27.1%	18.0%	38.8%	Below	Sample
United Family Medicine	66	27.1%	17.9%	38.9%	Below	Sample
Central Lakes Medical Clinic	66	27.0%	17.8%	38.8%	Below	Sample
Allina Health System	62	24.7%	15.7%	36.7%	Below	Sample
Sanford Clinic	67	21.5%	13.4%	32.8%	Below	Sample
North Memorial Clinic	66	18.5%	10.9%	29.5%	Below	Sample
Cedar Riverside People's Center	64	18.5%	10.8%	29.7%	Below	Sample
Fergus Falls Medical Group	66	15.7%	8.8%	26.3%	Below	Sample
Altru Health System	67	14.2%	7.8%	24.5%	Below	Sample
Bloomington Lake Clinic, Ltd.	66	13.7%	7.4%	24.0%	Below	Sample
Fairview Mesaba Clinics	64	12.5%	6.5%	22.8%	Below	Sample
Winona Clinic	66	9.7%	4.7%	19.2%	Below	Sample

**Table 9: Chlamydia Screening by Medical Group**  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name ( ■ = OB/GYN)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>57.2%</b>	<b>56.3%</b>	<b>58.1%</b>		
Dr. Bobby K. Yang Medical Clinic	30	90.0%	74.4%	96.5%	Above	Population
NorthPoint Health And Wellness Center	138	81.2%	73.8%	86.8%	Above	Population
Hennepin Faculty Associates & HCMC Clinics	331	76.4%	71.6%	80.7%	Above	Population
United Family Medicine	68	73.5%	62.0%	82.6%	Above	Population
HealthPartners Clinics	1,051	73.3%	70.5%	75.9%	Above	Population
HealthPartners Central Minnesota Clinics	102	69.6%	60.1%	77.7%	Above	Population
North Clinic	49	69.4%	55.5%	80.5%	Average	Population
Neighborhood Health Care Network	718	69.4%	65.9%	72.6%	Above	Population
■ Oakdale OB/GYN	38	65.8%	49.9%	78.8%	Average	Population
North Memorial Clinic	99	65.7%	55.9%	74.3%	Average	Population
Allina Medical Clinic	932	65.5%	62.3%	68.4%	Above	Population
Park Nicollet Health Services	446	65.3%	60.7%	69.5%	Above	Population
Camden Physicians	40	65.0%	49.5%	77.9%	Average	Population
Fairview Health Services	743	64.6%	61.1%	68.0%	Above	Population
Mid Minnesota Family Medicine Center	56	64.3%	51.2%	75.5%	Average	Population
Allina Health System	187	63.1%	56.0%	69.7%	Average	Population
Cedar Riverside People's Center	32	62.5%	45.3%	77.1%	Average	Population
Aspen Medical Group	190	61.1%	54.0%	67.7%	Average	Population
Affiliated Community Medical Centers	296	60.8%	55.2%	66.2%	Average	Population
Family Practice Medical Center Of Willmar	38	60.5%	44.7%	74.4%	Average	Population
HealthEast	206	59.2%	52.4%	65.7%	Average	Population
Stillwater Medical Group	39	59.0%	43.4%	72.9%	Average	Population
Ridgeview Clinics	33	57.6%	40.8%	72.8%	Average	Population
Mayo Clinic	138	57.3%	48.9%	65.2%	Average	Population
Riverwood Aitkin Clinic	42	57.1%	42.2%	70.9%	Average	Population
St. Cloud Medical Group	124	56.5%	47.7%	64.9%	Average	Population
St. Luke's Clinics	127	55.9%	47.2%	64.2%	Average	Population
Mankato Clinic	145	55.2%	47.1%	63.0%	Average	Population

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**Table 9: Chlamydia Screening by Medical Group – *continued***  
(Minnesota Health Care Programs with 30+ patients in denominator)

Medical Group Name ( ■ = OB/GYN)	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>57.2%</b>	<b>56.3%</b>	<b>58.1%</b>		
Children’s Physician Network	235	54.5%	48.1%	60.7%	Average	Population
MultiCare Associates Of The Twin Cities	86	53.5%	43.0%	63.7%	Average	Population
SuperiorHealth Center	36	52.8%	37.0%	68.0%	Average	Population
Winona Clinic	91	52.8%	42.6%	62.7%	Average	Population
Northstar Physicians	150	52.0%	44.1%	59.8%	Average	Population
Lakeview Clinic, Ltd.	33	51.5%	35.2%	67.5%	Average	Population
Olmsted Medical Center	161	50.9%	43.3%	58.5%	Average	Population
Buffalo Clinic	96	50.0%	40.2%	59.8%	Average	Population
Mayo Health System	553	49.9%	45.8%	54.1%	Below	Population
St. Mary’s/Duluth Clinic Health System	528	48.9%	44.6%	53.1%	Below	Population
Sanford Clinic	76	47.4%	36.5%	58.5%	Average	Population
Family Medical Center	81	46.9%	36.4%	57.7%	Average	Population
Avera Health/Avera Tri-State	74	44.6%	33.8%	55.9%	Below	Population
Fairview Mesaba Clinics	90	44.4%	34.6%	54.7%	Below	Population
Paynesville Area Health Care System	30	43.3%	27.4%	60.8%	Average	Population
Minnesota Rural Health Cooperative	269	42.0%	36.3%	48.0%	Below	Population
Altru Health System	110	40.9%	32.2%	50.3%	Below	Population
Hutchinson Medical Center	62	40.3%	29.0%	52.8%	Below	Population
Fergus Falls Medical Group	77	40.3%	30.0%	51.4%	Below	Population
Central Lakes Medical Clinic	55	40.0%	28.1%	53.2%	Below	Population
MeritCare	482	38.8%	34.6%	43.2%	Below	Population
Gundersen Clinic	32	37.5%	22.9%	54.8%	Below	Population
Innovis Health	173	34.1%	27.5%	41.4%	Below	Population
Broadway Medical Center	50	32.0%	20.8%	45.8%	Below	Population
Brainerd Medical Center	179	30.7%	24.4%	37.8%	Below	Population
Tri-County Hospital Clinics	34	29.4%	16.8%	46.2%	Below	Population
Alexandria Clinic	92	16.3%	10.1%	25.2%	Below	Population
Lakewood Health System	75	14.7%	8.4%	24.4%	Below	Population

**Table 10: Childhood Immunization by Medical Group**  
(Minnesota Health Care Programs with 60+ patients in sample)

Medical Group Name	N	Rate	Lower Bound of 95% Confidence Interval	Upper Bound of 95% Confidence Interval	Rating	Total Population or Sample (of MHCP patients)
<b>Medical Group Average</b>		<b>76.5%</b>	<b>75.0%</b>	<b>77.9%</b>		
MeritCare	62	91.6%	82.0%	96.3%	Above	Sample
Park Nicollet Health Services	67	88.4%	78.5%	94.0%	Above	Sample
HealthEast	70	84.7%	74.5%	91.3%	Average	Sample
Mayo Clinic	63	84.4%	73.5%	91.3%	Average	Sample
HealthPartners Clinics	192	84.0%	78.2%	88.5%	Above	Sample
Sanford Clinic	63	82.8%	71.6%	90.1%	Average	Sample
Aspen Medical Group	62	82.8%	71.5%	90.2%	Average	Sample
Mankato Clinic	70	82.5%	72.0%	89.6%	Average	Sample
Fairview Health Services	152	81.0%	74.0%	86.4%	Average	Sample
Affiliated Community Medical Centers	74	80.5%	70.0%	87.9%	Average	Sample
Allina Medical Clinic	135	80.0%	72.4%	85.9%	Average	Sample
Olmsted Medical Center	62	79.7%	68.1%	87.9%	Average	Sample
Innovis Health	61	78.9%	67.1%	87.3%	Average	Sample
St. Mary's/Duluth Clinic Health System	149	78.4%	71.1%	84.2%	Average	Sample
Metropolitan Pediatric Specialists	61	78.4%	66.5%	86.9%	Average	Sample
Mayo Health System	199	75.1%	68.7%	80.6%	Average	Sample
CentraCare Health System	71	74.9%	63.7%	83.5%	Average	Sample
Hennepin Faculty Associates & HCMC Clinics	106	73.8%	64.7%	81.2%	Average	Sample
Avera Health/Avera Tri-State	63	72.1%	60.0%	81.6%	Average	Sample
Children's Physician Network	160	71.3%	63.9%	77.8%	Average	Sample
Minnesota Rural Health Cooperative	88	71.3%	61.1%	79.7%	Average	Sample
Alexandria Clinic	62	71.0%	58.8%	80.8%	Average	Sample
Neighborhood Health Care Network	70	65.8%	54.1%	75.8%	Below	Sample
Family HealthServices Minnesota	63	65.0%	52.7%	75.6%	Below	Sample
University Of Minnesota Physicians	60	57.2%	44.6%	68.9%	Below	Sample
St. Luke's Clinics	66	42.4%	31.2%	54.4%	Below	Sample

## Appendix 4: Medical Group Performance Over Time (3-years)

**Table 1: Optimal Diabetes Care –  
Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Centracare Health System	3.0%	8.2%	10.7%	5.2%	2.5%	7.7%	Consistently Improved
Aspen Medical Group	2.5%	7.8%	11.8%	5.3%	4.0%	9.3%	Consistently Improved
Mayo Clinic	3.3%	7.7%	15.1%	4.4%	7.4%	11.8%	Consistently Improved
HealthPartners Clinics	9.4%	13.2%	15.8%	3.8%	2.6%	6.4%	Consistently Improved
Park Nicollet Health Services	8.9%	11.8%	16.1%	2.9%	4.3%	7.2%	Consistently Improved
Olmsted Medical Center	5.3%	7.5%	17.1%	2.2%	9.7%	11.8%	Consistently Improved
St. Luke's Clinics	1.4%	0.0%	1.3%	-1.4%	1.3%	-0.1%	Relatively Stable
Northstar Physicians	4.0%	4.3%	2.9%	0.3%	-1.4%	-1.1%	Relatively Stable
Altru Health System	4.5%	6.5%	0.0%	2.0%	-6.5%	-4.5%	Variable
Neighborhood Health Care Network	8.6%	10.2%	3.8%	1.6%	-6.4%	-4.8%	Variable
St. Mary's/Duluth Clinic Health System	5.1%	9.3%	7.0%	4.2%	-2.3%	1.9%	Variable
North Memorial Clinic	4.9%	3.4%	7.2%	-1.5%	3.8%	2.3%	Variable
Innovis Health	4.1%	5.4%	7.7%	1.3%	2.3%	3.6%	Variable
Minnesota Rural Health Cooperative	4.0%	5.0%	9.3%	1.0%	4.3%	5.3%	Variable
Meritcare	9.8%	13.7%	9.7%	3.9%	-4.0%	-0.1%	Variable
Mankato Clinic	5.8%	11.1%	10.8%	5.4%	-0.4%	5.0%	Variable
Mayo Health System	8.1%	4.6%	11.0%	-3.5%	6.4%	2.9%	Variable
Fairview Health Services	18.9%	13.0%	12.8%	-5.9%	-0.2%	-6.2%	Variable
University Of Minnesota Physicians	6.3%	7.8%	13.1%	1.5%	5.3%	6.8%	Variable
Affiliated Community Medical Centers	9.6%	13.3%	14.7%	3.6%	1.5%	5.1%	Variable
HealthEast	9.2%	6.4%	18.0%	-2.8%	11.7%	8.8%	Variable

**Table 2: Use of Appropriate Medications for People with Asthma (Ages 5 -56) – Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Innovis Health	82.5%	85.1%	89.1%	2.6%	4.1%	6.6%	Consistently Improved
HealthEast	97.2%	94.6%	86.4%	-2.7%	-8.1%	-10.9%	Consistently Decreased
Mayo Health System	93.0%	91.4%	91.0%	-1.6%	-0.4%	-2.0%	Relatively Stable
Affiliated Community Medical Centers	93.0%	93.9%	92.7%	0.9%	-1.2%	-0.3%	Relatively Stable
St. Luke's Clinics	71.4%	75.5%	64.3%	4.1%	-11.2%	-7.1%	Variable
St. Mary's/Duluth Clinic Health System	79.6%	81.6%	74.2%	2.1%	-7.4%	-5.4%	Variable
Northstar Physicians	78.1%	71.2%	76.9%	-6.9%	5.7%	-1.2%	Variable
Aspen Medical Group	83.6%	87.7%	80.6%	4.1%	-7.1%	-3.0%	Variable
Meritcare	83.0%	77.7%	84.2%	-5.3%	6.5%	1.2%	Variable
University Of Minnesota Physicians	85.4%	86.8%	84.8%	1.4%	-2.0%	-0.6%	Variable
Centracare Health System	89.6%	91.4%	86.7%	1.8%	-4.8%	-2.9%	Variable
Family HealthServices Minnesota	81.3%	85.4%	87.0%	4.2%	1.5%	5.7%	Variable
Park Nicollet Health Services	92.2%	87.4%	87.4%	-4.8%	0.0%	-4.8%	Variable
Olmsted Medical Center	95.7%	84.2%	89.1%	-11.4%	4.9%	-6.6%	Variable
Fairview Health Services	89.5%	86.9%	90.8%	-2.7%	3.9%	1.2%	Variable
HealthPartners Clinics	86.4%	87.7%	90.9%	1.4%	3.2%	4.5%	Variable
Neighborhood Health Care Network	88.1%	83.0%	91.1%	-5.1%	8.1%	3.0%	Variable
Children's Physician Network	95.5%	92.8%	93.9%	-2.7%	1.1%	-1.6%	Variable
Minnesota Rural Health Cooperative	93.1%	88.6%	94.1%	-4.5%	5.5%	1.0%	Variable

**Table 3: Appropriate Treatment for Children with Upper Respiratory Infection – Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
St. Cloud Medical Group	71.5%	78.0%	87.6%	6.5%	9.6%	16.1%	Consistently Improved
Northstar Physicians	71.8%	83.5%	87.9%	11.7%	4.4%	16.1%	Consistently Improved
Affiliated Community Medical Centers*	80.2%	84.7%	89.8%	4.6%	5.1%	9.6%	Consistently Improved
Family HealthServices Minnesota*	81.3%	86.2%	90.2%	4.8%	4.0%	8.8%	Consistently Improved
HealthEast	84.4%	90.7%	93.6%	6.3%	2.9%	9.2%	Consistently Improved
WestHealth Urgent Care*	79.0%	87.2%	94.7%	8.3%	7.5%	15.8%	Consistently Improved
Family Practice Medical Center Of Willmar*	84.5%	90.5%	97.1%	6.0%	6.6%	12.6%	Consistently Improved
Broadway Medical Center	67.4%	61.2%	52.0%	-6.1%	-9.3%	-15.4%	Consistently Decreased
Apple Valley Medical Clinic	78.5%	78.1%	76.9%	-0.4%	-1.1%	-1.5%	Relatively Stable
Fairview Health Services	89.7%	90.8%	89.9%	1.1%	-0.9%	0.2%	Relatively Stable
Mille Lacs Clinics	92.3%	94.2%	94.1%	1.9%	-0.1%	1.8%	Relatively Stable
North Memorial Clinic	95.5%	95.6%	95.0%	0.2%	-0.6%	-0.4%	Relatively Stable
University Of Minnesota Physicians	95.5%	97.4%	95.7%	1.8%	-1.6%	0.2%	Relatively Stable
Avera Health/Avera Tri-State	30.2%	28.8%	31.1%	-1.4%	2.3%	0.9%	Variable
Alexandria Clinic	69.6%	77.5%	66.2%	7.9%	-11.3%	-3.4%	Variable
Tri-County Hospital Clinics	59.7%	70.9%	68.0%	11.2%	-2.9%	8.2%	Variable
Central Lakes Medical Clinic	68.5%	62.5%	71.9%	-6.0%	9.4%	3.4%	Variable
St. Luke's Clinics	76.6%	79.0%	72.3%	2.4%	-6.8%	-4.4%	Variable
Ridgeview Clinics	69.4%	79.5%	73.3%	10.1%	-6.2%	3.9%	Variable
Altru Health System	75.5%	64.5%	73.8%	-10.9%	9.3%	-1.7%	Variable
Minnesota Rural Health Cooperative	69.8%	69.5%	74.5%	-0.2%	5.0%	4.8%	Variable
Brainerd Medical Center	81.3%	83.3%	78.3%	1.9%	-5.0%	-3.1%	Variable
Mayo Health System	77.3%	74.2%	78.3%	-3.1%	4.1%	0.9%	Variable
Lakewood Health System	70.1%	66.7%	79.9%	-3.4%	13.2%	9.8%	Variable
Multicare Associates Of The Twin Cities	80.2%	88.2%	82.1%	8.0%	-6.1%	1.9%	Variable
Olmsted Medical Center	83.7%	84.3%	82.2%	0.6%	-2.1%	-1.5%	Variable
Innovis Health	80.6%	85.1%	82.6%	4.5%	-2.5%	2.0%	Variable
Fairview Mesaba Clinics	79.3%	73.7%	84.3%	-5.6%	10.7%	5.1%	Variable
St. Mary's/Duluth Clinic Health System	84.7%	78.8%	85.5%	-5.9%	6.7%	0.8%	Variable

\* =  $P_{trend} < 0.05$

**Table 3: Appropriate Treatment for Children with Upper Respiratory Infection – Rate Changes for Reporting Years 2007-2009 – *continued***

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Sanford Clinic	75.4%	87.4%	85.9%	12.0%	-1.5%	10.5%	Variable
Riverwood Aitkin Clinic	81.3%	85.4%	86.0%	4.1%	0.6%	4.7%	Variable
Mankato Clinic	82.9%	83.9%	86.1%	1.0%	2.2%	3.2%	Variable
Fergus Falls Medical Group	85.5%	89.2%	86.4%	3.7%	-2.8%	0.8%	Variable
Family Medical Center	80.0%	67.8%	86.8%	-3.2%	19.0%	15.9%	Variable
Quello Clinic	89.1%	94.6%	87.7%	5.5%	-6.9%	-1.4%	Variable
Lakeview Clinic, Ltd.	88.0%	94.2%	88.8%	6.3%	-5.5%	0.8%	Variable
Centracare Health System	78.1%	77.7%	89.9%	-0.4%	12.3%	11.9%	Variable
Northwest Family Physicians	88.2%	90.3%	90.0%	2.1%	-0.3%	1.8%	Variable
Meritcare	86.0%	90.1%	90.0%	4.1%	-0.1%	4.0%	Variable
HealthPartners Central Minnesota Clinics	92.5%	95.2%	90.4%	2.7%	-4.8%	-2.1%	Variable
St. Joseph's Family Clinics	83.2%	83.1%	90.6%	-0.2%	7.6%	7.4%	Variable
Urgent Care Doctor's Office	85.1%	84.9%	90.9%	-0.2%	6.0%	5.8%	Variable
Buffalo Clinic	85.8%	92.9%	91.9%	7.1%	-1.0%	6.0%	Variable
Winona Clinic	83.2%	69.6%	92.0%	-13.5%	22.4%	8.8%	Variable
Aspen Medical Group	85.1%	90.9%	92.3%	5.9%	1.4%	7.3%	Variable
Neighborhood Health Care Network	95.2%	93.4%	92.6%	-1.7%	-0.9%	-2.6%	Variable
Park Nicollet Health Services*	90.5%	91.7%	92.7%	1.2%	1.0%	2.2%	Variable
MinuteClinic*	89.7%	91.5%	93.2%	1.8%	1.7%	3.5%	Variable
Stillwater Medical Group	89.3%	89.1%	93.9%	-0.2%	4.8%	4.6%	Variable
Mayo Clinic	91.4%	94.3%	93.9%	2.9%	-0.3%	2.6%	Variable
Hutchinson Medical Center	88.0%	89.2%	94.3%	1.2%	5.1%	6.3%	Variable
Express Healthcare	97.0%	92.7%	94.6%	-4.2%	1.9%	-2.4%	Variable
Gundersen Clinic	94.4%	97.6%	95.0%	3.2%	-2.6%	0.6%	Variable
United Family Medicine	88.2%	94.9%	95.5%	6.7%	0.5%	7.2%	Variable
Children's Physician Network	90.3%	94.8%	95.6%	4.5%	0.9%	5.3%	Variable
HealthPartners Clinics	94.0%	96.6%	96.5%	2.6%	-0.1%	2.5%	Variable
Camden Physicians	93.5%	95.1%	97.3%	1.6%	2.2%	3.8%	Variable
Columbia Park Medical Group - Part Of Fairview	82.8%	81.9%	97.9%	-0.9%	16.0%	15.1%	Variable

\* =  $p_{\text{trend}} < 0.05$

**Table 4: Appropriate Testing for Children with Pharyngitis –  
Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Fairview Mesaba Clinics*	22.1%	28.3%	35.9%	6.2%	7.6%	13.8%	Consistently Improved
Avera Health/Avera Tri-State	21.8%	26.8%	45.2%	4.9%	18.5%	23.4%	Consistently Improved
Mankato Clinic	57.1%	61.0%	76.8%	3.9%	15.9%	19.8%	Consistently Improved
Meritcare	61.6%	68.6%	80.5%	7.0%	11.9%	18.9%	Consistently Improved
Northstar Physicians	86.0%	91.3%	94.3%	5.3%	3.0%	8.3%	Consistently Improved
Alexandria Clinic	76.7%	70.7%	67.7%	-6.0%	-3.0%	-9.0%	Consistently Decreased
HealthPartners Clinics	95.8%	95.5%	95.7%	-0.3%	0.2%	-0.1%	Relatively Stable
Riverwood Aitkin Clinic	41.9%	79.5%	34.3%	37.6%	-45.2%	-7.7%	Variable
Lakewood Health System	46.9%	67.9%	37.0%	21.0%	-30.9%	-9.9%	Variable
Altru Health System	36.0%	47.8%	40.7%	11.7%	-7.1%	4.7%	Variable
Broadway Medical Center	53.0%	58.8%	56.8%	5.8%	-2.1%	3.7%	Variable
Tri-County Hospital Clinics	70.9%	74.4%	61.2%	3.5%	-13.2%	-9.8%	Variable
Innovis Health	72.2%	72.3%	63.4%	0.1%	-8.9%	-8.9%	Variable
Brainerd Medical Center	57.2%	67.7%	66.7%	10.5%	-1.1%	9.5%	Variable
Unity Family Healthcare - Avon	60.0%	90.6%	66.7%	30.6%	-24.0%	6.7%	Variable
Minnesota Rural Health Cooperative	59.4%	67.9%	67.3%	8.5%	-0.6%	7.8%	Variable
St. Joseph's Family Clinics	73.7%	91.2%	67.5%	17.6%	-23.7%	-6.2%	Variable
North Memorial Clinic	66.2%	83.3%	68.6%	17.1%	-14.8%	2.4%	Variable
St. Mary's/Duluth Clinic Health System	63.8%	68.2%	68.9%	4.3%	0.7%	5.0%	Variable
Mayo Health System	67.3%	64.9%	69.0%	-2.4%	4.1%	1.7%	Variable
Affiliated Community Medical Centers	78.2%	71.7%	70.6%	-6.5%	-1.1%	-7.6%	Variable
Sanford Clinic	67.0%	62.2%	71.1%	-4.9%	8.9%	4.1%	Variable
Family HealthServices Minnesota	79.5%	79.6%	75.0%	0.2%	-4.6%	-4.5%	Variable
Mayo Clinic	79.9%	85.5%	75.2%	5.6%	-10.3%	-4.7%	Variable

\* =  $p_{trend} < 0.05$

**Table 4: Appropriate Testing for Children with Pharyngitis –  
Rate Changes for Reporting Years 2007-2009 – *continued***

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Fergus Falls Medical Group	68.1%	51.1%	76.5%	-17.0%	25.4%	8.4%	Variable
St. Luke's Clinics	45.4%	79.2%	81.1%	33.9%	1.9%	35.8%	Variable
Olmsted Medical Center	85.5%	92.4%	84.5%	6.9%	-7.9%	-1.0%	Variable
Centracare Health System	90.7%	83.7%	85.5%	-7.0%	1.8%	-5.2%	Variable
Quello Clinic	91.9%	91.3%	85.7%	-0.6%	-5.6%	-6.2%	Variable
Lakeview Clinic, Ltd.	80.8%	88.0%	88.6%	7.2%	0.6%	7.8%	Variable
Apple Valley Medical Clinic	88.5%	90.5%	90.5%	2.0%	0.0%	2.0%	Variable
Northwest Family Physicians	92.5%	95.2%	90.6%	2.8%	-4.6%	-1.8%	Variable
St. Cloud Medical Group	82.8%	80.3%	91.2%	-2.4%	10.9%	8.4%	Variable
Aspen Medical Group	90.8%	85.9%	92.6%	-4.9%	6.7%	1.8%	Variable
Park Nicollet Health Services*	88.2%	90.1%	92.6%	2.0%	2.5%	4.4%	Variable
Children's Physician Network	85.4%	95.9%	93.2%	10.5%	-2.7%	7.8%	Variable
Fairview Health Services	84.8%	91.9%	93.4%	7.1%	1.5%	8.5%	Variable
HealthEast	88.1%	88.1%	93.6%	0.0%	5.4%	5.4%	Variable
Buffalo Clinic	90.2%	94.1%	93.7%	3.9%	-0.5%	3.4%	Variable
Neighborhood Health Care Network	84.5%	92.8%	94.1%	8.3%	1.3%	9.6%	Variable
HealthPartners Central Minnesota Clinics	93.9%	88.0%	95.1%	-5.9%	7.1%	1.1%	Variable
Stillwater Medical Group	94.4%	97.1%	96.2%	2.6%	-0.8%	1.8%	Variable
MinuteClinic	100.0%	99.0%	96.8%	-1.0%	-2.2%	-3.2%	Variable
University Of Minnesota Physicians	96.9%	93.3%	97.6%	-3.7%	4.3%	0.6%	Variable
WestHealth Urgent Care	94.4%	100.0%	97.7%	5.6%	-2.3%	3.3%	Variable
Express Healthcare	100.0%	96.7%	98.6%	-3.3%	1.8%	-1.5%	Variable
Multicare Associates Of The Twin Cities	94.8%	98.0%	98.8%	3.2%	0.8%	4.0%	Variable

\* =  $p_{trend} < 0.05$

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**Table 5: Breast Cancer Screening –  
Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Family HealthServices Minnesota	48.3%	55.9%	60.0%	7.6%	4.1%	11.7%	Consistently Improved
United Family Medicine	43.8%	50.0%	63.8%	6.2%	13.8%	20.0%	Consistently Improved
Fairview Health Services	59.0%	62.5%	67.5%	3.5%	5.1%	8.5%	Consistently Improved
North Memorial Clinic	60.0%	63.3%	67.7%	3.3%	4.5%	7.7%	Consistently Improved
Family Medical Center	54.7%	59.3%	69.6%	4.6%	10.3%	14.9%	Consistently Improved
Minnesota Rural Health Cooperative	62.6%	67.9%	70.1%	5.2%	2.3%	7.5%	Consistently Improved
Avera Health/Avera Tri-State	55.6%	66.7%	71.2%	11.1%	4.5%	15.6%	Consistently Improved
Multicare Associates Of The Twin Cities	55.8%	62.0%	75.6%	6.2%	13.6%	19.8%	Consistently Improved
Hutchinson Medical Center	75.7%	66.7%	42.4%	-9.0%	-24.3%	-33.3%	Consistently Decreased
North Clinic	74.4%	71.4%	64.6%	-2.9%	-6.9%	-9.8%	Consistently Decreased
Central Lakes Medical Clinic	83.8%	72.9%	68.3%	-10.9%	-4.6%	-15.5%	Consistently Decreased
Fergus Falls Medical Group	82.2%	79.6%	69.2%	-2.7%	-10.3%	-13.0%	Consistently Decreased
Mankato Clinic	78.5%	75.4%	69.4%	-3.1%	-5.9%	-9.0%	Consistently Decreased
Northstar Physicians	56.1%	56.4%	54.8%	0.3%	-1.6%	-1.3%	Relatively Stable
Neighborhood Health Care Network	53.3%	48.3%	50.8%	-4.9%	2.5%	-2.5%	Variable
University Of Minnesota Physicians*	54.8%	52.9%	50.8%	-1.8%	-2.1%	-3.9%	Variable
St. Joseph's Family Clinics	66.7%	66.7%	52.8%	0.0%	-13.9%	-13.9%	Variable
SuperiorHealth Center	66.7%	52.6%	53.9%	-14.0%	1.2%	-12.8%	Variable
St. Luke's Clinics	57.5%	58.9%	54.6%	1.4%	-4.3%	-2.9%	Variable
Tri-County Hospital Clinics	72.5%	73.2%	59.0%	0.7%	-14.2%	-13.5%	Variable
Healtheast	58.7%	58.4%	60.7%	-0.3%	2.3%	2.0%	Variable
Affiliated Community Medical Centers	66.9%	65.7%	62.3%	-1.3%	-3.4%	-4.6%	Variable
Lakewood Health System	59.5%	76.3%	62.8%	16.9%	-13.6%	3.3%	Variable
Centracare Health System	69.1%	67.2%	64.8%	-1.8%	-2.5%	-4.3%	Variable
Ridgeview Clinics	47.5%	64.1%	65.6%	16.6%	1.5%	18.1%	Variable
St. Mary's/Duluth Clinic Health System	61.2%	64.6%	66.1%	3.3%	1.5%	4.9%	Variable
Altru Health System	69.4%	62.3%	66.2%	-7.1%	3.9%	-3.2%	Variable
Brainerd Medical Center	65.6%	61.0%	66.7%	-4.6%	5.7%	1.1%	Variable
Bloomington Lake Clinic, Ltd.	60.5%	60.4%	66.7%	-0.1%	6.3%	6.2%	Variable
Meritcare	73.0%	72.7%	66.9%	-0.3%	-5.7%	-6.0%	Variable
Sanford Clinic	66.7%	74.4%	68.4%	7.7%	-5.9%	1.8%	Variable
Buffalo Clinic	62.5%	59.0%	69.2%	-3.5%	10.3%	6.7%	Variable
Innovis Health	63.8%	64.0%	69.5%	0.2%	5.5%	5.7%	Variable
Alexandria Clinic	65.3%	80.9%	71.4%	15.5%	-9.4%	6.1%	Variable
Olmsted Medical Center	70.0%	76.4%	72.0%	6.4%	-4.4%	2.0%	Variable
Mayo Health System	63.6%	74.7%	72.5%	11.1%	-2.1%	8.9%	Variable
Park Nicollet Health Services	70.3%	74.9%	72.8%	4.7%	-2.2%	2.5%	Variable
St. Cloud Medical Group	66.7%	76.6%	72.9%	9.9%	-3.7%	6.3%	Variable
HealthPartners Clinics	71.4%	73.1%	73.4%	1.7%	0.3%	2.0%	Variable
Aspen Medical Group	70.7%	69.6%	75.9%	-1.1%	6.3%	5.2%	Variable
Mayo Clinic	74.7%	70.8%	79.1%	-3.9%	8.3%	4.5%	Variable

\* =  $p_{trend} < 0.05$

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**Table 6: Cervical Cancer Screening –  
Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
St. Paul Family Medical Center*	50.8%	59.7%	69.6%	8.9%	10.0%	18.8%	Consistently Improved
Northwest Family Physicians*	70.2%	73.0%	76.2%	2.8%	3.3%	6.1%	Consistently Improved
HealthPartners Central Minnesota Clinics	75.5%	80.4%	82.9%	5.0%	2.4%	7.4%	Consistently Improved
Foley Medical Center	77.6%	70.5%	59.0%	-7.1%	-11.5%	-18.6%	Consistently Decreased
Brainerd Medical Center	78.6%	75.3%	64.1%	-3.3%	-11.2%	-14.5%	Consistently Decreased
Stillwater Medical Group	78.2%	75.9%	69.1%	-2.3%	-6.8%	-9.1%	Consistently Decreased
Olmsted Medical Center	80.3%	75.7%	69.6%	-4.6%	-6.1%	-10.7%	Consistently Decreased
Family HealthServices Minnesota*	76.6%	74.2%	71.5%	-2.4%	-2.8%	-5.2%	Consistently Decreased
Winona Clinic	85.6%	80.6%	71.6%	-5.1%	-9.0%	-14.0%	Consistently Decreased
Quello Clinic*	82.3%	77.7%	73.6%	-4.6%	-4.1%	-8.7%	Consistently Decreased
Neighborhood Health Care Network	70.9%	71.3%	70.3%	0.4%	-0.9%	-0.5%	Relatively Stable
Mayo Health System	70.5%	71.6%	71.2%	1.1%	-0.4%	0.7%	Relatively Stable
HealthEast	73.4%	72.3%	73.5%	-1.1%	1.2%	0.0%	Relatively Stable
HealthPartners Clinics	79.1%	78.0%	78.3%	-1.1%	0.3%	-0.8%	Relatively Stable
Buffalo Clinic	78.1%	79.2%	78.9%	1.2%	-0.3%	0.8%	Relatively Stable
St. Joseph's Family Clinics	66.2%	65.0%	48.2%	-1.2%	-16.8%	-18.0%	Variable
Cedar Riverside People's Center	53.2%	58.8%	58.3%	5.5%	-0.5%	5.0%	Variable
Avera Health/Avera Tri-State	74.8%	77.5%	62.6%	2.7%	-14.9%	-12.1%	Variable
Ridgeview Clinics	70.2%	71.4%	65.1%	1.2%	-6.3%	-5.1%	Variable
Scenic Rivers Health Services	78.4%	81.4%	65.5%	3.0%	-15.8%	-12.9%	Variable
Gundersen Clinic	79.3%	80.0%	65.6%	0.7%	-14.4%	-13.7%	Variable
Central Lakes Medical Clinic	81.9%	84.5%	65.7%	2.6%	-18.8%	-16.2%	Variable
Fergus Falls Medical Group	74.5%	75.1%	66.0%	0.5%	-9.1%	-8.6%	Variable
Tri-County Hospital Clinics	67.3%	75.7%	66.0%	8.4%	-9.8%	-1.4%	Variable
Minnesota Rural Health Cooperative	73.8%	75.6%	67.0%	1.8%	-8.6%	-6.9%	Variable
Innovis Health	76.2%	78.6%	67.5%	2.4%	-11.1%	-8.6%	Variable
Lakewood Health System	71.4%	78.3%	68.4%	6.9%	-10.0%	-3.0%	Variable
Family Medical Center	72.3%	74.7%	68.4%	2.4%	-6.2%	-3.9%	Variable
Fairview Mesaba Clinics	73.8%	76.0%	68.7%	2.2%	-7.3%	-5.1%	Variable
Mille Lacs Clinics	68.6%	77.0%	68.8%	8.4%	-8.3%	0.1%	Variable
Mayo Clinic	76.5%	82.2%	69.1%	5.7%	-13.1%	-7.4%	Variable
Hutchinson Medical Center	79.0%	77.5%	70.0%	-1.4%	-7.5%	-9.0%	Variable

\* =  $P_{trend} < 0.05$

**Table 6: Cervical Cancer Screening –  
Rate Changes for Reporting Years 2007-2009 – *continued***

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Riverwood Aitkin Clinic	78.8%	77.9%	70.2%	-0.9%	-7.7%	-8.6%	Variable
Affiliated Community Medical Centers	76.7%	79.0%	70.4%	2.3%	-8.6%	-6.3%	Variable
Apple Valley Medical Clinic	67.7%	73.9%	71.0%	6.1%	-2.9%	3.2%	Variable
Altru Health System	75.7%	74.2%	72.0%	-1.5%	-2.2%	-3.7%	Variable
St. Luke's Clinics	67.8%	69.0%	72.0%	1.2%	3.0%	4.2%	Variable
Alexandria Clinic	76.8%	79.5%	72.2%	2.7%	-7.3%	-4.6%	Variable
Paynesville Area Health Care System	77.2%	77.6%	72.3%	0.4%	-5.3%	-4.9%	Variable
Meritcare	80.3%	78.7%	72.6%	-1.6%	-6.2%	-7.7%	Variable
Northstar Physicians	72.5%	75.8%	72.6%	3.3%	-3.2%	0.1%	Variable
St. Cloud Medical Group	81.2%	82.9%	72.7%	1.7%	-10.2%	-8.5%	Variable
Family Medicine Of Winona	70.7%	74.7%	73.3%	4.1%	-1.4%	2.7%	Variable
University Of Minnesota Physicians	76.5%	78.1%	73.4%	1.6%	-4.7%	-3.1%	Variable
United Family Medicine	73.7%	78.2%	73.4%	4.4%	-4.8%	-0.3%	Variable
Broadway Medical Center	75.0%	76.7%	73.5%	1.7%	-3.2%	-1.5%	Variable
Sanford Clinic	73.3%	79.1%	73.7%	5.7%	-5.4%	0.4%	Variable
North Clinic	76.0%	82.0%	74.7%	6.0%	-7.2%	-1.3%	Variable
Camden Physicians	77.2%	79.6%	74.8%	2.3%	-4.8%	-2.5%	Variable
St. Mary's/Duluth Clinic Health System	75.3%	77.0%	74.9%	1.7%	-2.1%	-0.4%	Variable
North Memorial Clinic	74.4%	77.3%	76.5%	2.9%	-0.8%	2.1%	Variable
Bloomington Lake Clinic, Ltd.	83.0%	75.6%	77.0%	-7.4%	1.4%	-6.0%	Variable
SuperiorHealth Center	81.6%	79.4%	78.1%	-2.2%	-1.4%	-3.5%	Variable
Centracare Health System	79.6%	80.2%	78.2%	0.7%	-2.1%	-1.4%	Variable
Park Nicollet Health Services	81.0%	80.2%	78.3%	-0.8%	-2.0%	-2.7%	Variable
Multicare Associates Of The Twin Cities	75.0%	76.2%	78.6%	1.2%	2.5%	3.6%	Variable
Unity Family Healthcare - Avon	76.9%	81.6%	79.0%	4.7%	-2.7%	2.0%	Variable
Mankato Clinic	79.6%	82.0%	79.0%	2.4%	-3.0%	-0.6%	Variable
Aspen Medical Group	81.2%	80.5%	79.0%	-0.7%	-1.5%	-2.2%	Variable
Fairview Health Services	75.0%	79.7%	79.4%	4.7%	-0.4%	4.3%	Variable
Family Practice Medical Center Of Willmar	82.3%	86.9%	82.7%	4.6%	-4.2%	0.4%	Variable
Silver Lake Clinic	79.5%	69.2%	82.7%	-10.3%	13.5%	3.2%	Variable
Lakeview Clinic, Ltd.	74.4%	83.5%	82.8%	9.1%	-0.8%	8.3%	Variable
Edina Family Physicians	81.6%	83.3%	83.8%	1.8%	0.5%	2.2%	Variable

**Table 7: Childhood Immunization –  
Rate Changes for Reporting Years 2007-2009**

Medical Group Name	2007 MHCP Rate	2008 MHCP Rate	2009 MHCP Rate	Rate Gap (2008-2007)	Rate Gap (2009-2008)	Rate Gap (2009-2007)	Rate Gap Pattern (2007-2009)
Fairview Health Services*	64.1%	73.1%	81.0%	9.0%	7.9%	16.9%	Consistently Improved
Children's Physician Network*	82.4%	76.3%	71.3%	-6.0%	-5.0%	-11.0%	Consistently Decreased
Minnesota Rural Health Cooperative	61.3%	73.5%	71.3%	12.2%	-2.1%	10.0%	Variable
Mayo Health System	74.2%	72.1%	75.1%	-2.1%	3.0%	0.9%	Variable
St. Mary's/Duluth Clinic Health System	60.5%	81.8%	78.4%	21.3%	-3.5%	17.9%	Variable
Affiliated Community Medical Centers	83.4%	86.0%	80.5%	2.6%	-5.6%	-3.0%	Variable
HealthPartners Clinics	85.9%	82.5%	84.0%	-3.4%	1.6%	-1.8%	Variable

\* =  $p_{trend} < 0.05$

## Appendix 5: Purchaser Performance Rate Differences

### Statistical Methods for Analysis of Purchaser Performance Rate Differences

An analysis was conducted to assess whether a gap between purchasers within a medical group was present and whether the gap was statistically significant. Medical groups were included in the analysis if both purchaser categories met the minimum reporting requirements for a measure. Therefore, for administrative measures, a medical group was included in the analysis if each purchaser category had at least 30 patients. For the hybrid measures, a medical group was included if each purchaser category had at least 60 patients. This limits the number of medical groups that can be included in analysis. The t-test was used to determine if gaps found between purchasers at the medical group level were statistically significant. The p-value of less than 0.05 included in this report is unadjusted for multiple test differences.

A second analysis was conducted using a two-tailed t-test comparing purchaser rate gaps in medical groups to purchaser rate gaps at the statewide level. A two-tailed test was used to show whether the purchaser rate gap at the medical group level was statistically bigger or smaller than the statewide purchaser rate gap. Significance was designated at a p-value less than 0.05. Statistically, this means that the difference between gaps was significant.

## Optimal Diabetes Care

Ten medical groups met the minimum reporting requirement of at least 60 patients per purchaser group for this analysis. The purchaser performance rate gap at the statewide level was 7 percentage points and is statistically significant. This means that the Optimal Diabetes Care statewide rate for MHCP patients (10%) was significantly lower than that of Other Purchasers (17%).

Eight of the medical groups had rates for MHCP patients that were lower than Other Purchasers; two of the medical groups had rates for MHCP patients that were higher than Other Purchasers (designated with negative signs in Column 4). There were no statistically significant gaps between purchasers within medical groups tested (see Column 5). This means that although gaps were found between purchasers within every medical group, they were not significant gaps. This is a notable change from previous Health Care Disparities Reports where some medical groups had statistically significant gaps between purchasers within the medical group.

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap at the statewide level. For Optimal Diabetes Care, seven medical groups had bigger purchaser gaps than the gap at the statewide level; three medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Six medical groups had significantly bigger purchaser gaps than the statewide gap; one medical group had a significantly smaller purchaser gap than the statewide gap and its MHCP rate was higher than its Other Purchasers rate (see Column 6).

There were three medical groups that had higher MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gap was not significantly different than the statewide purchaser rate gap - **HealthEast, Park Nicollet Health Services and HealthPartners Clinics**. Table 1 summarizes these findings.

**Table 1: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Optimal Diabetes Care**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	9.9%	16.8%	6.9%	Y	
Allina Medical Clinic	17.2%	28.1%	10.9%	.	Y
Aspen Medical Group	11.8%	3.1%	-8.9%	.	Y
Fairview Health Services	12.8%	21.8%	9.1%	.	Y
Family HealthServices Minnesota	9.9%	28.6%	18.7%	.	Y
HealthEast	18.0%	21.9%	3.9%	.	.
HealthPartners Clinics	15.8%	23.2%	7.5%	.	.
Mayo Health System	11.0%	5.1%	-5.9%	.	Y
Meritcare	9.7%	21.2%	11.5%	.	Y
Park Nicollet Health Services	16.1%	19.3%	3.2%	.	.
St. Mary's/Duluth Clinic Health System	7.0%	22.4%	15.4%	.	Y

Y = Yes, statistical significance

## Controlling High Blood Pressure

Eleven medical groups met the minimum reporting requirement of at least 60 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 6 percentage points and is statistically significant. This means that the Controlling High Blood Pressure statewide rate for MHCP patients (64%) was significantly lower than that of Other Purchasers (70%).

Ten of the medical groups had rates for MHCP patients that were lower than Other Purchasers; one medical group had a rate for MHCP patients that was higher than Other Purchasers (designated with a negative sign in Column 4). Three medical groups had statistically significant gaps between purchasers within the medical group (see Column 5). For two of those medical groups, MHCP patients had significantly lower performance rates than patients enrolled with Other Purchasers; for one medical group MHCP patients had a significantly higher performance rate.

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap at the statewide level. For Controlling High Blood Pressure, six medical groups had bigger purchaser gaps than the gap at the statewide level; five medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Six medical groups had significantly bigger purchaser gaps than the statewide gap; for one of these medical groups the MHCP rate is higher than the Other Purchaser rate gap (see Column 6).

There were five medical groups that had higher MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gap was not significantly different than the statewide purchaser rate gap – Allina Medical Clinic, Family HealthServices Minnesota, HealthEast, HealthPartners Clinics and Park Nicollet Health Services. Table 2 summarizes these findings.

**Table 2: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Controlling High Blood Pressure**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	63.6%	69.9%	6.3%	Y	
Allina Health System	60.9%	76.8%	15.9%	Y	Y
Allina Medical Clinic	70.4%	76.6%	6.2%	.	.
Aspen Medical Group	59.0%	66.2%	7.2%	.	Y
Fairview Health Services	63.2%	74.6%	11.3%	Y	Y
Family HealthServices Minnesota	82.1%	84.9%	2.8%	.	.
HealthEast	77.5%	79.7%	2.2%	.	.
HealthPartners Clinics	73.5%	77.4%	3.9%	.	.
North Clinic	62.3%	70.0%	7.7%	.	Y
Park Nicollet Health Services	73.7%	78.7%	5.0%	.	.
Sanford Clinic	64.1%	49.9%	-14.2%	Y	Y
St. Mary's/Duluth Clinic Health System	67.9%	77.9%	10.0%	.	Y

Y = Yes, statistical significance

## Use of Appropriate Medications for People with Asthma (Ages 5-56)

Twenty-six medical groups met the minimum reporting requirement of at least 30 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 5 percentage points and is statistically significant. This means that the Use of Appropriate Medications for People with Asthma statewide rate for MHCP patients (87%) was significantly lower than that of Other Purchasers (93%).

Two medical groups had rate gaps of less than one percent suggesting little or no difference between MHCP and Other Purchaser patients. Sixteen of the medical groups had rates for MHCP patients that were lower than Other Purchasers; eight of the medical groups had rates for MHCP patients that were higher than Other Purchasers (designated with negative signs in Column 4). Eleven medical groups had statistically significant gaps between purchasers within the medical group (see Column 5). For seven of these groups MHCP patients had significantly lower performance rates; four medical groups MHCP patients had significantly higher performance rates compared to Other Purchasers.

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Use of Appropriate Medications for People with Asthma measure, 12 medical groups had bigger purchaser gaps than the gap at the statewide level; 14 medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Seventeen medical groups had purchaser gaps that were significantly different than the statewide gap. Ten of these medical groups had gaps significantly bigger than the statewide gap; seven medical groups had gaps significantly smaller than the statewide gap (see Column 6).

There were two medical groups – **Alexandria Clinic and Mayo Health System** – that had higher MHCP performance rates, little or no gap between purchasers within the medical group, AND their purchaser rate gaps (<1%) were significantly smaller than the statewide purchaser rate gap (5%). Table 3 summarizes these findings.

**Table 3: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Use of Appropriate Medications for People with Asthma**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	87.6%	92.8%	5.2%	Y	
Affiliated Community Medical Centers	92.7%	96.3%	3.6%	.	Y
Aspen Medical Group	80.6%	93.6%	13.0%	Y	Y
Alexandria Clinic	97.4%	97.2%	0.2%	.	Y
Allina Health System	80.4%	94.0%	-13.7%	Y	Y
Allina Medical Clinic	87.2%	92.7%	-5.5%	Y	.
Buffalo Clinic	90.6%	92.4%	1.8%	.	Y
Centracare Health System	86.7%	96.6%	9.9%	Y	Y
Children's Physician Network	93.9%	97.7%	3.8%	Y	.
Fairview Health Services	90.8%	93.1%	2.3%	.	Y
Family HealthServices Minnesota	87.0%	91.7%	4.7%	.	.
HealthEast	86.4%	91.0%	4.5%	.	.
HealthPartners Clinics	90.9%	93.1%	2.2%	.	Y
Hennepin Faculty Assoc & HCMC Clinics	90.5%	95.0%	-4.5%	.	.
Innovis Health	89.1%	93.2%	4.1%	.	.
Mankato Clinic	91.4%	95.7%	4.2%	.	.
Mayo Clinic	88.1%	98.2%	-10.1%	Y	Y
Mayo Health System	91.0%	91.3%	0.3%	.	Y
Meritcare	84.2%	95.6%	11.4%	Y	Y
Minnesota Rural Health Cooperative	94.1%	90.3%	-3.8%	.	Y
Northstar Physicians	76.9%	90.0%	-13.1%	.	Y
Olmsted Medical Center	89.1%	93.6%	4.5%	.	.
Park Nicollet Health Services	87.4%	93.8%	6.4%	Y	.
St. Cloud Medical Group	97.3%	90.5%	-6.8%	.	Y
St. Luke's Clinics	64.3%	90.7%	-26.4%	Y	Y
St. Mary's/Duluth Clinic Health System	74.2%	89.6%	15.4%	Y	Y
University Of Minnesota Physicians	84.8%	94.3%	9.5%	Y	Y

Y = Yes, statistical significance

## Appropriate Treatment for Children with Upper Respiratory Infection

Sixty-one medical groups met the minimum reporting requirement of at least 30 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was less than 1 percentage point and was not statistically significant. This means that there is no difference at the statewide level between purchasers for the Appropriate Treatment for Children with Upper Respiratory Infection.

Eleven medical groups had purchaser performance gaps of less than 1 percent suggesting little or no difference between MHCP and Other Purchaser patients. Eighteen of the medical groups had rates for MHCP patients that were lower than Other Purchasers; 32 of the medical groups had rates for MHCP patients that were higher than Other Purchasers (designated with negative signs in Column 4). Nine medical groups had statistically significant gaps between purchasers within the medical group (see Column 5). For one of these groups MHCP patients had significantly lower performance rates; for eight groups MHCP patients had significantly higher performance rates compared to Other Purchasers.

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Appropriate Treatment for Children with upper Respiratory Infection measure, four medical groups had little or no gaps between purchasers. Fifty-seven medical groups had bigger purchaser gaps than the gap at the statewide level. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Forty-four medical groups had purchaser gaps that were significantly different than the statewide gap. Forty-six of these medical groups had gaps significantly bigger than the statewide gap; two medical groups had gaps significantly smaller than the statewide gap (see Column 6).

There were five medical groups – **Allina Medical Clinic, Aspen Medical Group, HealthPartners Central Minnesota Clinics, HealthPartners Clinics and MinuteClinic** – that had higher MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gap was not significantly different than the statewide purchaser rate gap. Table 4 summarizes these findings.

**Table 4: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Appropriate Treatment for Children with Upper Respiratory Infection**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
<b>Statewide</b>	<b>87.1%</b>	<b>87.0%</b>	<b>Less than -0.1%</b>	.	
<b>Affiliated Community Medical Centers</b>	89.8%	87.6%	-2.1%	.	.
<b>Altru Health System</b>	73.8%	78.7%	4.9%	.	Y
<b>Apple Valley Medical Clinic</b>	76.9%	83.0%	6.1%	.	Y
<b>Alexandria Clinic</b>	66.2%	69.6%	3.4%	.	Y
<b>Allina Health System</b>	93.4%	87.5%	-5.9%	.	Y
<b>Allina Medical Clinic</b>	92.8%	92.1%	-0.7%	.	.
<b>Aspen Medical Group</b>	92.3%	90.1%	-2.3%	.	.
<b>Avera Health/Avera Tri-State</b>	31.1%	63.8%	32.7%	Y	Y
<b>Brainerd Medical Center</b>	78.3%	72.6%	-5.7%	.	Y
<b>Broadway Medical Center</b>	52.0%	57.1%	5.2%	.	Y
<b>Buffalo Clinic</b>	91.9%	94.0%	2.1%	.	Y
<b>Camden Physicians</b>	97.3%	91.0%	-6.3%	.	Y
<b>Centracare Health System</b>	89.9%	85.7%	-4.2%	.	Y
<b>Central Lakes Medical Clinic</b>	71.9%	59.0%	-12.9%	.	Y
<b>Children's Physician Network</b>	95.6%	92.7%	-2.9%	Y	.
<b>Columbia Park Medical Group (Fairview)</b>	97.9%	87.9%	-9.9%	.	Y
<b>Express Healthcare</b>	94.6%	94.8%	0.2%	.	Y
<b>Fairview Health Services</b>	89.9%	88.0%	-1.9%	.	.
<b>Family Health Medical Clinics</b>	86.7%	92.8%	6.1%	.	Y
<b>Family Healthservices Minnesota</b>	90.2%	86.1%	-4.0%	.	Y
<b>Family Medical Center</b>	86.8%	94.6%	7.8%	.	Y
<b>Fergus Falls Medical Group</b>	86.4%	90.4%	4.0%	.	Y
<b>Gundersen Clinic</b>	95.0%	92.3%	-2.7%	.	.
<b>HealthEast</b>	93.6%	93.0%	-0.6%	.	.
<b>HealthPartners Central Minnesota Clinics</b>	90.4%	90.1%	-0.3%	.	.
<b>HealthPartners Clinics</b>	96.5%	95.0%	-1.5%	.	.
<b>Hennepin Faculty Assoc &amp; HCMC Clinics</b>	97.2%	92.3%	-4.9%	.	Y
<b>Hutchinson Medical Center</b>	94.3%	86.6%	-7.7%	.	Y
<b>Innovis Health</b>	82.6%	83.1%	0.5%	.	Y
<b>Lakeview Clinic, Ltd.</b>	88.8%	84.9%	-3.9%	.	Y
<b>Lakewood Health System</b>	79.9%	78.6%	-1.3%	.	.

Y = Yes, statistical significance

**Table 4: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Appropriate Treatment for Children with Upper Respiratory Infection – *continued***

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	87.1%	87.0%	Less than -0.1%	.	
Mankato Clinic	86.1%	79.9%	-6.1%	.	Y
Mayo Health System	78.3%	80.3%	2.0%	.	Y
Mayo Clinic	93.9%	84.8%	-9.2%	Y	Y
Meritcare	90.0%	89.8%	-0.2%	.	Y
Metropolitan Pediatric Specialists	94.9%	92.2%	-2.7%	.	.
Minnesota Rural Health Cooperative	74.5%	71.4%	-3.1%	.	.
Minute Clinic	93.2%	93.3%	0.1%	.	.
Multicare Associates Of The Twin Cities	82.1%	83.1%	1.0%	.	Y
Northwest Family Physicians	90.0%	90.8%	0.8%	.	Y
North Memorial Clinic	95.0%	90.8%	-4.2%	.	Y
Northstar Physicians	87.9%	66.3%	-21.6%	Y	Y
Olmsted Medical Center	82.2%	82.2%	0.0%	.	.
Paynesville Area Health Care System	69.1%	56.3%	-12.8%	.	Y
Park Nicollet Health Services	92.7%	87.6%	-5.1%	Y	Y
Priority Pediatrics Urgent Care	100.0%	93.0%	-7.0%	.	Y
Ridgeview Clinics	73.3%	77.5%	4.1%	.	Y
Quello Clinic	87.7%	93.9%	6.2%	.	Y
Riverview Clinics	58.3%	35.6%	-22.9%	Y	Y
St. Cloud Medical Group	87.6%	74.0%	-13.6%	Y	Y
St. Joseph's Family Clinics	90.6%	96.7%	6.1%	.	Y
St. Luke's Clinics	72.3%	85.5%	13.2%	.	Y
St. Mary's/Duluth Clinic Health System	85.5%	78.4%	-7.1%	Y	Y
Sanford Clinic	85.9%	87.3%	1.6%	.	Y
Stillwater Medical Group	93.9%	90.1%	-3.8%	.	Y
Suburban Emergency Associates	97.8%	73.5%	-24.3%	Y	Y
Tri-County Hospital Clinics	68.0%	75.0%	7.0%	.	Y
University Of Minnesota Physicians	95.7%	93.6%	-2.1%	.	.
Urgent Care Doctor's Office	90.9%	90.9%	0.0%	.	.
WestHealth Urgent Care	94.7%	94.6%	-0.1%	.	.
Winona Clinic	92.0%	93.2%	1.2%	.	Y

Y = Yes, statistical significance

## Appropriate Testing for Children with Pharyngitis

Fifty-one medical groups met the minimum reporting requirement of at least 30 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 8 percentage points and is statistically significant. This means that the Appropriate Testing for Children with Pharyngitis statewide rate for MHCP patients (81%) was significantly lower than that of Other Purchasers (88%).

Four medical groups had rate gaps of less than one percent suggesting little or no difference between MHCP and Other Purchaser patients. Thirty-nine of the medical groups had rates for MHCP patients that were lower than Other Purchasers; eleven of the medical groups had rates for MHCP patients that were higher than Other Purchasers (designated with negative signs in Column 4). Fifteen medical groups had statistically significant gaps between purchasers; all 15 had lower MCHP rates compared to Other Purchasers within the medical group (see Column 5).

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Appropriate Testing for Children with Pharyngitis measure, one medical group had a purchaser gap that was equal to the statewide gap; 15 medical groups had bigger purchaser gaps than the gap at the statewide level; 35 medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Forty-one medical groups had purchaser gaps that were significantly different than the statewide gap. Fifteen of these medical groups had gaps significantly bigger than the statewide gap; 26 medical groups had gaps significantly smaller than the statewide gap (see Column 6).

There were 15 medical groups that had above average MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gaps were smaller than the statewide purchaser rate gap. Table 5 summarizes these findings.

**Table 5: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Appropriate Testing for Children with Pharyngitis**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
<b>Statewide</b>	<b>80.7%</b>	<b>88.2%</b>	<b>7.5%</b>	<b>Y</b>	
Affiliated Community Medical Centers	70.6%	75.0%	4.4%	.	.
Alexandria Clinic	67.7%	78.8%	11.1%	.	Y
Allina Health System	83.8%	91.3%	7.5%	.	.
Allina Medical Clinic*	87.3%	87.9%	0.6%	.	Y
Altru Health System	40.7%	63.3%	22.6%	Y	Y
Apple Valley Medical Clinic	90.5%	92.2%	1.7%	.	Y
Aspen Medical Group*	92.6%	96.6%	4.0%	.	.
Avera Health/Avera Tri-State	45.2%	60.5%	15.3%	Y	Y
Broadway Medical Center	56.8%	69.1%	12.3%	.	Y
Brainerd Medical Center	66.7%	66.1%	-0.6%	.	Y
Buffalo Clinic*	93.7%	91.5%	-2.2%	.	Y
Centracare Health System	85.5%	96.4%	10.9%	Y	Y
Central Lakes Medical Clinic	59.0%	77.4%	18.4%	.	Y
Chaska Urgent Care*	97.2%	91.2%	-6.0%	.	Y
Children's Physician Network	93.2%	96.9%	3.7%	Y	.
Express Healthcare*	98.6%	96.1%	-2.5%	.	Y
Fairview Health Services	93.4%	95.9%	2.5%	Y	.
Family HealthServices Minnesota	75.0%	87.7%	12.7%	Y	Y
Family Medical Center	72.4%	85.0%	12.6%	Y	Y
Fergus Falls Medical Group	76.5%	82.9%	6.4%	.	Y
HealthEast*	93.6%	94.6%	1.0%	.	Y
HealthPartners Central Minnesota Clinics*	95.1%	91.7%	-3.4%	.	Y
HealthPartners Clinics*	95.7%	95.8%	0.1%	.	Y
Hutchinson Medical Center	90.6%	88.2%	-2.4%	.	Y
Innovis Health	63.4%	74.8%	11.4%	Y	Y
Lakeview Clinic, Ltd.	88.6%	89.7%	1.1%	.	Y
Mankato Clinic	76.8%	82.0%	5.2%	.	Y
Mayo Health System	69.0%	78.2%	9.2%	Y	Y
Mayo Clinic	75.2%	76.9%	1.7%	.	Y
Meritcare	80.5%	77.5%	-2.9%	.	Y
Minnesota Rural Health Cooperative	67.3%	74.5%	7.2%	Y	Y
Minute Clinic	96.8%	99.4%	2.6%	Y	.
Multicare Associates Of The Twin Cities*	98.8%	97.1%	-1.7%	.	Y
North Memorial Clinic	68.6%	89.1%	20.5%	Y	Y
Northstar Physicians*	94.3%	90.5%	-3.8%	.	Y
Northwest Family Physicians	90.6%	93.8%	3.2%	.	.
Olmsted Medical Center	84.5%	88.2%	3.7%	.	.
Park Nicollet Health Services*	92.6%	94.9%	2.3%	.	Y
Paynesville Area Health Care System	82.1%	87.5%	5.4%	.	Y
Quello Clinic	85.7%	91.7%	6.0%	.	Y
Riverview Clinics	38.9%	21.7%	-17.2%	.	Y
St. Cloud Medical Group*	91.2%	88.8%	-2.4%	.	Y
St. Joseph's Family Clinics	67.5%	85.4%	17.9%	Y	Y
St. Luke's Clinics	81.1%	82.0%	0.9%	.	Y
St. Mary's/Duluth Clinic Health System	68.9%	74.6%	5.7%	.	Y
Sanford Clinic	71.1%	75.0%	3.9%	.	.
Stillwater Medical Group*	96.2%	95.2%	-1.0%	.	Y
Tri-County Hospital Clinics	61.2%	79.1%	17.9%	Y	Y
Unity Family Healthcare - Avon	66.7%	96.2%	29.5%	Y	Y
WestHealth Urgent Care*	97.7%	95.1%	-2.6%	.	Y
Winona Clinic*	91.9%	94.4%	2.5%	.	.

\* = Group had an above average rate, no significant gap between purchasers, and the purchaser gap was smaller than statewide purchaser gap.

Y = Yes, statistical significance

## Breast Cancer Screening

Forty-eight medical groups met the minimum reporting requirement of at least 30 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 16 percentage points and is statistically significant. This means that the Breast Cancer Screening statewide rate for MHCP patients (62%) was significantly lower than that of Other Purchasers (78%).

All 48 medical groups had rates for MHCP patients that were lower than Other Purchasers (see Column 4). Thirty-nine medical groups had statistically significant gaps between purchasers within the medical group and all were significantly lower for MHCP compared to Other Purchasers (see Column 5).

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Breast Cancer Screening measure, 24 medical groups had bigger purchaser gaps than the gap at the statewide level, 22 medical groups had smaller purchaser gaps. Two medical groups had gaps that equaled the statewide level. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Thirty-nine medical groups had purchaser gaps that were significantly different than the statewide gap. Eighteen of these medical groups had gaps significantly bigger than the statewide gap; 21 medical groups had gaps significantly smaller than the statewide gap (see Column 6).

There were two medical groups – **MultiCare Associates of the Twin Cities** and **St. Cloud Medical Group** – that had higher MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gaps were significantly smaller than the statewide purchaser rate gap. Table 6 summarizes these findings.

**Table 6: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Breast Cancer Screening**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
<b>Statewide</b>	<b>61.9%</b>	<b>77.9%</b>	<b>16.0%</b>	Y	
Affiliated Community Medical Centers	62.3%	85.5%	23.2%	Y	Y
Altru Health System	66.2%	83.8%	17.6%	Y	.
Alexandria Clinic	71.4%	88.6%	17.2%	Y	.
Allina Health System	59.0%	84.3%	25.3%	Y	Y
Allina Medical Clinic	63.5%	82.3%	18.8%	Y	Y
Aspen Medical Group	75.9%	85.3%	9.4%	Y	Y
Avera Health/Avera Tri-State	71.2%	81.8%	10.6%	Y	Y
Bloomington Lake Clinic, Ltd.	66.7%	83.0%	16.3%	Y	.
Brainerd Medical Center	66.7%	84.8%	18.1%	Y	Y
Buffalo Clinic	69.2%	80.5%	11.3%	.	Y
Centracare Health System	64.8%	86.9%	22.1%	Y	Y
Central Lakes Medical Clinic	68.3%	84.7%	16.4%	Y	.
Family HealthServices Minnesota	60.0%	80.3%	20.3%	Y	Y
Family Medical Center	69.6%	81.1%	11.5%	.	Y
Fairview Health Services	67.5%	82.9%	15.4%	Y	Y
Fairview Mesaba Clinics	64.3%	77.9%	13.6%	.	Y
Fergus Falls Medical Group	69.2%	86.0%	16.8%	Y	.
HealthEast	60.7%	83.0%	22.3%	Y	Y
HealthPartners Clinics	73.4%	89.2%	15.8%	Y	.
Hennepin Faculty Assoc & HCMC Clinics	70.7%	81.7%	11.0%	Y	Y
Hutchinson Medical Center	42.4%	74.4%	32.0%	Y	Y
Innovis Health	69.5%	80.8%	11.3%	Y	Y
Lakewood Health System	62.8%	76.6%	13.8%	Y	Y
Mankato Clinic	69.4%	85.8%	16.4%	Y	.
Mayo Clinic	79.1%	89.4%	10.3%	Y	Y
Mayo Health System	72.5%	81.4%	8.9%	Y	Y
Meritcare	66.9%	84.8%	17.9%	Y	Y
Minnesota Rural Health Cooperative	70.1%	80.1%	10.0%	Y	Y
Multicare Associates Of The Twin Cities	75.6%	79.6%	4.0%	.	Y
Neighborhood Health Care Network	50.8%	69.2%	18.4%	Y	Y
North Clinic	64.6%	86.5%	21.9%	Y	Y
North Memorial Clinic	67.7%	78.1%	10.4%	.	Y
Northstar Physicians	54.8%	80.1%	25.3%	Y	Y
Olmsted Medical Center	72.0%	87.4%	15.4%	Y	Y
Park Nicollet Health Services	72.8%	87.8%	15.0%	Y	Y
Ridgeview Clinics	65.6%	75.6%	10.0%	.	Y
Riverwood Aitkin Clinic	77.4%	92.8%	15.4%	Y	Y
St. Cloud Medical Group	72.9%	81.2%	8.3%	.	Y
St. Joseph's Family Clinics	52.8%	76.9%	24.1%	Y	Y
St. Luke's Clinics	54.6%	84.3%	29.7%	Y	Y
St. Mary's/Duluth Clinic Health System	66.1%	82.1%	16.0%	Y	.
Sanford Clinic	68.4%	84.4%	16.0%	Y	.
Stillwater Medical Group	58.3%	79.4%	21.1%	Y	Y
SuperiorHealth Center	53.9%	75.1%	21.2%	Y	Y
Tri-County Hospital Clinics	59.0%	72.1%	13.1%	.	Y
University Of Minnesota Physicians	50.8%	81.3%	30.5%	Y	Y
Winona Clinic	60.0%	80.0%	20.0%	Y	Y
United Family Medicine	63.8%	72.2%	8.4%	Y	Y

Y = Yes, statistical significance

## Cervical Cancer Screening

Seventy-six medical groups met the minimum reporting requirement of at least 30 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 6 percentage points and is statistically significant. This means that the Cervical Cancer Screening statewide rate for MHCP patients (71%) was significantly lower than that of Other Purchasers (77%).

Nine medical groups had rate gaps of less than one percentage point suggesting little or no difference between MHCP and Other Purchaser patients. Sixty of the medical groups had rates for MHCP patients that were lower than Other Purchasers; seven of the medical groups had rates for MHCP patients that were higher than Other Purchasers (designated with negative signs in Column 4). Thirty-three medical groups had statistically significant lower MHCP rates compared to Other Purchasers within the medical group (see Column 5).

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Cervical Cancer Screening measure, one medical group had a purchaser gap that was equal to the statewide gap; 38 medical groups had bigger purchaser gaps than the gap at the statewide level; 37 medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Seventy-one medical groups had purchaser gaps that were significantly different than the statewide gap. Thirty-four of these medical groups had gaps significantly bigger than the statewide gap; 37 medical groups had gaps significantly smaller than the statewide gap (see Column 6).

There were 9 medical groups that had above average MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gaps were smaller than the statewide purchaser rate gap. Table 7 summarizes these findings.

**Table 7: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Cervical Cancer Screening**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
<b>Statewide</b>	<b>71.0%</b>	<b>76.8%</b>	<b>5.8%</b>	Y	
<b>Affiliated Community Medical Centers</b>	70.4%	81.3%	10.9%	Y	Y
<b>Alexandria Clinic</b>	72.2%	83.9%	11.6%	Y	Y
<b>Allina Health System</b>	74.7%	82.4%	7.7%	Y	.
<b>Allina Medical Clinic</b>	75.4%	81.5%	6.1%	Y	Y
<b>Altru Health System</b>	72.0%	80.8%	8.8%	Y	Y
<b>Apple Valley Medical Clinic</b>	71.0%	77.1%	6.1%	.	Y
<b>Aspen Medical Group*</b>	79.0%	82.3%	3.3%	.	Y
<b>Avera Health/Avera Tri-State</b>	62.6%	81.6%	19.0%	Y	Y
<b>Bloomington Lake Clinic, Ltd.</b>	77.0%	82.3%	5.3%	.	Y
<b>Broadway Medical Center</b>	73.5%	75.0%	1.5%	.	Y
<b>Brainerd Medical Center</b>	64.1%	75.8%	11.7%	Y	Y
<b>Buffalo Clinic</b>	78.9%	83.3%	4.4%	.	Y
<b>Camden Physicians</b>	74.8%	80.6%	5.8%	.	.
<b>Centracare Health System</b>	78.2%	85.2%	7.0%	Y	.
<b>Central Lakes Medical Clinic</b>	65.7%	70.3%	4.6%	.	Y
<b>Edina Family Physicians</b>	83.8%	90.6%	6.8%	.	.
<b>Fairview Health Services</b>	79.4%	83.0%	3.6%	Y	Y
<b>Fairview Mesaba Clinics</b>	68.7%	72.5%	3.8%	.	Y
<b>Family Healthservices Minnesota</b>	71.5%	75.8%	4.3%	.	Y
<b>Family Medical Center</b>	68.4%	79.7%	11.3%	Y	Y
<b>Family Medicine Of Winona</b>	73.3%	71.4%	-1.9%	.	Y
<b>Family Practice Medical Center Of Willmar</b>	82.7%	83.2%	0.5%	.	Y
<b>Fergus Falls Medical Group</b>	66.0%	71.2%	5.3%	.	Y
<b>Foley Medical Center</b>	59.0%	71.4%	12.4%	.	Y
<b>Gundersen Clinic</b>	65.6%	77.0%	11.4%	.	Y
<b>HealthEast</b>	73.5%	79.6%	6.1%	Y	Y
<b>HealthPartners Clinics</b>	78.3%	84.3%	6.0%	Y	Y
<b>HealthPartners Central Minnesota Clinics*</b>	82.9%	81.4%	-1.5%	.	Y
<b>Hennepin Faculty Assoc &amp; HCMC Clinics</b>	72.7%	80.8%	8.1%	Y	Y
<b>Hutchinson Medical Center</b>	70.0%	70.7%	0.7%	.	Y
<b>Innovis Health</b>	67.5%	79.5%	12.0%	Y	Y
<b>John A. Haugen Assoc.*</b>	100.0%	98.8%	-1.2%	.	Y
<b>Lakeview Clinic, Ltd.*</b>	82.8%	82.5%	-0.3%	.	Y
<b>Lakewood Health System</b>	68.4%	81.3%	12.9%	Y	Y
<b>Mankato Clinic</b>	79.0%	80.4%	1.4%	.	Y
<b>Mayo Clinic</b>	69.1%	74.7%	5.6%	.	Y
<b>Mayo Health System</b>	71.2%	72.5%	1.3%	.	Y
<b>Meritcare</b>	72.6%	80.6%	8.0%	Y	Y

\* = Group had an above average rate, no significant gap between purchasers, and the purchaser gap was smaller than statewide purchaser gap.

Y = Yes, statistical significance

Table 7: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Cervical Cancer Screening – *continued*

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	71.0%	76.8%	5.8%	Y	
Metropolitan OB/GYN*	95.0%	98.4%	3.4%	.	Y
Mid Minnesota Family Medicine Center	66.9%	84.6%	17.7%	Y	Y
Minute Clinic	63.2%	74.2%	11.0%	.	Y
Mille Lacs Clinics	68.8%	72.1%	3.3%	.	Y
Minnesota Rural Health Cooperative	67.0%	77.9%	10.9%	Y	Y
Multicare Associates Of The Twin Cities	78.6%	80.6%	2.0%	.	Y
Neighborhood Health Care Network	70.3%	80.5%	10.2%	Y	Y
North Clinic	74.7%	83.9%	9.2%	Y	Y
Northland OB/GYN Assoc.*	97.9%	93.1%	-4.8%	.	Y
North Memorial Clinic	76.5%	77.3%	0.8%	.	Y
Northstar Physicians	72.6%	72.1%	-0.5%	.	Y
Northwest Family Physicians	76.2%	78.0%	1.8%	.	Y
Northpoint Health And Wellness Center	77.9%	76.7%	-1.2%	.	Y
Now Care Medical Centers	48.7%	65.3%	16.6%	Y	Y
Oakdale OB/GYN	91.4%	96.9%	5.5%	Y	Y
OB/GYN & Infertility*	97.7%	97.7%	0.0%	.	Y
Obstetrics & Gynecology Associates*	95.2%	96.1%	0.9%	.	Y
Olmsted Medical Center	69.6%	79.9%	10.3%	Y	Y
Park Nicollet Health Services	78.3%	85.4%	7.1%	Y	.
Paynesville Area Health Care System	72.3%	76.3%	4.0%	.	Y
Quello Clinic	73.6%	84.8%	11.2%	Y	Y
Ridgeview Clinics	65.1%	77.6%	12.5%	Y	Y
Riverwood Aitkin Clinic	70.2%	82.7%	12.5%	Y	Y
St. Mary's/Duluth Clinic Health System	74.9%	74.0%	-0.8%	.	Y
Southdale OB/GYN Consultants*	100.0%	99.8%	-0.2%	.	Y
Stillwater Medical Group	69.1%	80.3%	11.2%	Y	Y
St. Cloud Medical Group	72.7%	81.6%	8.9%	Y	Y
St. Joseph's Family Clinics	48.2%	75.4%	27.2%	Y	Y
St. Luke's Clinics	72.0%	73.4%	1.4%	.	Y
Sanford Clinic	73.7%	84.4%	10.7%	Y	Y
Scenic Rivers Health Services	65.5%	76.1%	10.5%	.	Y
Silver Lake Clinic	82.7%	85.3%	2.6%	.	Y
SuperiorHealth Center	78.1%	70.5%	-7.6%	.	Y
Tri-County Hospital Clinics	66.0%	80.5%	14.5%	Y	Y
United Family Medicine	73.4%	78.8%	5.4%	.	Y
Unity Family Healthcare - Avon	79.0%	77.1%	-1.9%	.	Y
University Of Minnesota Physicians	73.4%	82.6%	9.2%	Y	Y
Winona Clinic	71.6%	75.2%	3.6%	.	Y

\* = Group had an above average rate, no significant gap between purchasers, and the purchaser gap was smaller than statewide purchaser gap.

Y = Yes, statistical significance

## Colorectal Cancer Screening

Eleven medical groups met the minimum reporting requirement of at least 60 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 29 percentage points and is statistically significant. This means that the Colorectal Cancer Screening statewide rate for MHCP patients (39%) was significantly lower than that of Other Purchasers (68%).

All eleven medical groups had rates for MHCP patients that were lower than Other Purchasers (see Column 4) and all were significantly lower for MHCP compared to Other Purchasers (see Column 5).

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Colorectal Cancer Screening measure, six medical groups had bigger purchaser gaps than the gap at the statewide level; five medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Nine medical groups had purchaser gaps that were significantly different than the statewide gap. Five of these medical groups had gaps significantly bigger than the statewide gap; four medical groups had gaps significantly smaller than the statewide gap (see Column 6). Table 8 summarizes these findings.

**Table 8: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Colorectal Cancer Screening**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
<b>Statewide</b>	<b>39.2%</b>	<b>68.0%</b>	<b>28.8%</b>	Y	
Allina Medical Clinic	48.3%	72.9%	24.6%	Y	Y
Aspen Medical Group	30.2%	73.3%	43.1%	Y	Y
Fairview Health Services	46.2%	79.6%	33.4%	Y	.
Family HealthServices Minnesota	31.3%	82.1%	50.8%	Y	Y
HealthEast	35.0%	85.6%	50.6%	Y	Y
HealthPartners Clinics	53.3%	76.0%	22.7%	Y	Y
Mayo Health System	60.4%	74.7%	14.3%	Y	Y
Northstar Physicians	30.6%	77.7%	47.1%	Y	Y
Park Nicollet Health Services	52.6%	79.4%	26.8%	Y	.
St. Luke's Clinics	48.8%	88.2%	39.4%	Y	Y
St. Mary's/Duluth Clinic Health System	44.9%	70.2%	25.3%	Y	Y

Y = Yes, statistical significance

## Chlamydia Screening

Fifty-two medical groups met the minimum reporting requirement of at least 30 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 11 percentage points and is statistically significant. The sign is negative, however, which means that the Chlamydia Screening rate for MHCP patients (56%) was significantly higher than that of Other Purchasers (45%).

One medical group had a rate gap of less than one percentage point suggesting little or no difference between MHCP and Other Purchaser patients. Eight of the medical groups had rates for MHCP patients that were lower than Other Purchasers; forty-three of the medical groups had rates for MHCP patients that were higher than Other Purchasers (designated with negative signs in Column 4). Two medical groups had statistically significant lower MCHP rates compared to Other Purchasers within the medical group; 28 medical groups had statistically significant higher MHCP rates compared to Other Purchasers within the medical group (see Column 5).

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Chlamydia Testing measure, one medical group had a purchaser gap that was equal to but opposite of the statewide gap. This means that while the purchaser rate gap at the medical group level was the same as the statewide gap, the MHCP rate was lower than the rate of Other Purchasers. Twenty-nine medical groups had bigger purchaser gaps than the gap at the statewide level; 22 medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Forty-four medical groups had purchaser gaps that were significantly different than the statewide gap. Twenty-six of these medical groups had gaps significantly bigger than the statewide gap; 18 medical groups had gaps significantly smaller than the statewide gap (see Column 6).

There was one medical group – **United Family Medicine** – that had had an above average MHCP performance rate, no significant gap between purchasers within the medical group, AND their purchaser rate gap was smaller than the statewide purchaser rate gap. Table 9 summarizes these findings.

Table 9: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Chlamydia Screening

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	56.1%	44.8%	-11.3%	Y	
Affiliated Community Medical Centers	60.8%	45.4%	-15.4%	Y	Y
Alexandria Clinic	16.3%	16.1%	-0.2%	.	Y
Allina Health System	63.1%	43.8%	-19.3%	Y	Y
Allina Medical Clinic	65.5%	59.2%	-6.3%	Y	Y
Altru Health System	40.9%	24.1%	-16.8%	Y	Y
Aspen Medical Group	61.1%	45.7%	-15.4%	Y	Y
Avera Health/Avera Tri-State	44.6%	28.3%	-16.3%	Y	Y
Brainerd Medical Center	30.7%	42.0%	11.3%	Y	.
Broadway Medical Center	32.0%	36.0%	4.0%	.	Y
Buffalo Clinic	50.0%	44.9%	-5.1%	.	Y
Camden Physicians	65.0%	48.7%	-16.3%	.	Y
Central Lakes Medical Clinic	40.0%	33.3%	-6.7%	.	Y
Children's Physician Network	54.5%	35.1%	-19.4%	Y	Y
Fairview Health Services	64.6%	55.0%	-9.6%	Y	.
Fairview Mesaba Clinics	44.4%	29.1%	-15.3%	.	Y
Family Medical Center	46.9%	48.6%	1.7%	.	Y
Family Practice Medical Center Of Willmar	60.5%	72.3%	11.8%	.	Y
Fergus Falls Medical Group	40.3%	35.1%	-5.2%	.	Y
Gundersen Clinic	37.5%	40.7%	3.2%	.	Y
HealthPartners Central Minnesota Clinics	69.6%	50.3%	-19.3%	Y	Y
HealthEast	59.2%	49.8%	-9.4%	Y	Y
HealthPartners Clinics	73.3%	66.9%	-6.4%	Y	Y
Hennepin Faculty Assoc & HCMC Clinics	76.4%	57.4%	-19.0%	Y	Y
Hutchinson Medical Center	40.3%	42.4%	2.1%	.	Y
Innovis Health	34.1%	32.6%	-1.5%	.	Y
Lakeview Clinic, Ltd.	51.5%	54.9%	3.4%	.	Y

Y = Yes, statistical significance

**Table 9: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Chlamydia Screening – *continued***

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
<b>Statewide</b>	<b>56.1%</b>	<b>44.8%</b>	<b>-11.3%</b>	Y	
<b>Lakewood Health System</b>	14.7%	33.9%	19.2%	Y	Y
<b>Mankato Clinic</b>	55.2%	47.2%	-8.0%	.	Y
<b>Mayo Clinic</b>	57.3%	36.6%	-20.7%	Y	Y
<b>Mayo Health System</b>	49.9%	36.5%	-13.4%	Y	Y
<b>Meritcare</b>	38.8%	28.6%	-10.2%	Y	.
<b>Mid Minnesota Family Medicine Center</b>	64.3%	41.0%	-23.3%	Y	Y
<b>Minnesota Rural Health Cooperative</b>	42.0%	33.0%	-9.0%	Y	Y
<b>Multicare Associates Of The Twin Cities</b>	53.5%	40.8%	-12.7%	Y	.
<b>Neighborhood Health Care Network</b>	69.4%	49.9%	-19.5%	Y	Y
<b>North Clinic</b>	69.4%	37.6%	-31.8%	Y	Y
<b>North Memorial Clinic</b>	65.7%	49.3%	-16.4%	Y	Y
<b>Northstar Physicians</b>	52.0%	34.9%	-17.1%	Y	Y
<b>Oakdale OB/GYN</b>	65.8%	48.0%	-17.8%	.	Y
<b>Olmsted Medical Center</b>	50.9%	44.8%	-6.1%	.	Y
<b>Park Nicollet Health Services</b>	65.3%	47.3%	-18.0%	Y	Y
<b>Paynesville Area Health Care System</b>	43.3%	30.6%	-12.7%	.	.
<b>Ridgeview Clinics</b>	57.6%	44.4%	-13.2%	.	.
<b>St. Cloud Medical Group</b>	56.5%	47.3%	-9.1%	.	Y
<b>St. Luke's Clinics</b>	55.9%	38.0%	-17.9%	Y	Y
<b>St. Mary's/Duluth Clinic Health System</b>	48.9%	38.3%	-10.6%	Y	.
<b>Sanford Clinic</b>	47.4%	33.2%	-14.2%	Y	Y
<b>Stillwater Medical Group</b>	59.0%	50.6%	-8.4%	.	Y
<b>SuperiorHealth Center</b>	52.8%	30.7%	-22.1%	Y	Y
<b>Tri-County Hospital Clinics</b>	29.4%	13.5%	-15.9%	.	Y
<b>United Family Medicine</b>	73.5%	63.4%	-10.1%	.	.
<b>Winona Clinic</b>	52.8%	38.7%	-14.0%	Y	Y

Y = Yes, statistical significance

## Childhood Immunization

Six medical groups met the minimum reporting requirement of at least 60 patients per purchaser for this analysis. The purchaser performance rate gap at the statewide level was 5 percentage points and is statistically significant. This means that the Childhood Immunization statewide rate for MHCP patients (75%) was significantly lower than that of Other Purchasers (80%).

One medical group – **Allina Medical Clinic** – had a rate gap of less than one percentage point suggesting little or no difference between MHCP and Other Purchaser patients. Four of the medical groups had rates for MHCP patients that were lower than Other Purchasers; one medical group – **Sanford Clinic** – had a rate for MHCP patients that was higher than Other Purchasers (designated with negative signs in Column 4). One medical group had a statistically significant lower MCHP rate compared to Other Purchasers within the medical group; one medical group had a statistically significant higher MHCP rate compared to Other Purchasers within the medical group (see Column 5).

We also assessed whether the absolute value of the gap between purchasers at a medical group level was bigger or smaller than the gap found at the statewide level. For the Childhood Immunization measure, two medical groups had bigger purchaser gaps than the gap at the statewide level; four medical groups had smaller purchaser gaps. Next, we tested the significance of each medical group purchaser gap compared to the statewide purchaser gap. Two medical groups had purchaser gaps that were significantly different than the statewide gap. Both of these medical groups had gaps significantly bigger than the statewide gap (see Column 6).

There were four medical groups – **Allina Medical Clinic, Fairview Health Services, HealthPartners Clinics and Park Nicollet Health Services** – that had higher MHCP performance rates, no significant gap between purchasers within the medical group, AND their purchaser rate gaps were significantly smaller than the statewide purchaser rate gap. Table 10 summarizes these findings.

**Table 10: Statistical Analysis Summary of Purchaser Performance Rate Gaps – Childhood Immunization**

Medical Group	MHCP Rate	Other Purchasers Rate	Percentage Point Rate Differences (Other-MHCP)	There is a significant gap within the medical group between purchasers.	There are significant differences between the statewide gap and the medical group gap.
Statewide	74.7%	79.7%	5.0%	Y	
Allina Medical Clinic	80.0%	80.9%	0.97%	.	.
Children’s Physician Network	71.3%	82.2%	10.9%	Y	Y
Fairview Health Services	81.0%	85.4%	4.4%	.	.
HealthPartners Clinics	84.0%	86.6%	2.6%	.	.
Park Nicollet Health Services	88.4%	89.6%	1.2%	.	.
Sanford Clinic	82.8%	58.6%	-24.2%	Y	Y

Y = Yes, statistical significance

## Appendix 6: Glossary

**Attributed Patient** – A patient assigned, or attributed, to a medical group for measurement purposes when the patient had one or more visits to that medical group during the measurement year. If a patient visited more than one medical group during the measurement year, the patient was attributed to the clinic at which he or she was seen the greatest number of times. If the number of visits to two different medical groups was the same, the patient was attributed to the medical group he or she visited most recently. An unattributed patient could be someone a health plan had identified using pharmacy data, as having diabetes; however, since this patient did not visit a medical group during the measurement year he or she could not be assigned to a medical group during the attribution process.

**Benchmarks** – The benchmarks (standards used for comparisons) include the 2009 national commercial HEDIS rate and the 2009 national Medicaid HEDIS rate. The benchmark HEDIS rate is a national average of more than 90 percent of managed health care plans and some PPO health plans that submit data to HEDIS to measure performance against a detailed set of measure criteria. Benchmarks were included for measures that had a comparable national Medicaid HEDIS rate (Use of Appropriate Medications for People with Asthma, Appropriate Treatment for Children with Upper Respiratory Infection, Appropriate Testing for Children with Pharyngitis, Cervical Cancer Screening, and Childhood Immunization Status).

**Dual Eligibles** – Patients who were enrolled in both Medicare and Medical Assistance programs.

**HEDIS** – Healthcare Effectiveness Data and Information Set. HEDIS measures, produced by the National Committee for Quality Assurance, are a set of standardized, quantifiable measures designed to allow reliable comparisons of the performance of insurers and care providers across a broad range of important health issues.

**Institute for Clinical Systems Improvement (ICSI)** – ICSI is an independent collaborative that helps its members provide evidence-based health care services to patients. Comprised of 57 medical groups and sponsored by six Minnesota health plans, ICSI unites diverse stakeholders to deliver patient-centered and value-driven care in Minnesota and surrounding areas.

**Measure Categories** – MN Community Measurement groups measures into the following categories to summarize medical group performance:

- **Living with Illness measures** – This category includes measures that assess how well medical groups care for patients with chronic conditions such as asthma or diabetes.
- **Getting Better measures** – This category includes measures that assess how well medical groups care for patients with common acute illnesses such as colds and sore throats.
- **Staying Healthy measures** – This category includes measures that assess how well medical groups keep individuals healthy and identify disease at an early stage when it can be treated most effectively.

**Medical Group** – One or more clinic sites operated by a single organization.

*(continued on next page)*

## Appendix 6: Glossary

**Minnesota Health Care Programs (MHCP)** – These health care programs (i.e., Medical Assistance including dual eligibles, MinnesotaCare, General Assistance Medical Care) provide service under both fee-for-service and managed care delivery systems purchased by the Minnesota Department of Human Services. This report only includes performance rates for the managed care programs (i.e., Medical Assistance including dual eligibles, MinnesotaCare and General Assistance Medical Care).

**MHCP Medical Group Average** – Represents the average performance of all medical groups for patients covered by MHCP. The MHCP medical group average includes ONLY those MHCP patients who were attributed to medical groups. Some medical groups meet the minimum threshold necessary for MN Community Measurement to report on the medical group's performance and some do not, but all of their data are included in calculating this average. This rate is the most appropriate average to use on the graphs that compare a single medical group with the performance of all medical groups. The medical group average might be slightly higher than the MHCP statewide average because it only includes patients who accessed care within the measurement year. MHCP medical group averages are only used on charts that compare groups.

**MHCP Statewide Average** – Represents the average performance rate at the statewide level for all attributed MHCP patients. MHCP statewide averages include patients who were attributed to a medical group AND patients who were not attributed to a medical group.

**MN Community Measurement (MNCM)** – Minnesota Community Measurement is an independent, community-based, non-profit organization dedicated to accelerating the improvement of health in Minnesota and surrounding communities through measurement and public reporting of health care performance. For more information, visit, [www.mncm.org](http://www.mncm.org).

**Statewide Rates** – Includes patients meeting measurement criteria enrolled in managed care health plans including commercial, Medicaid managed care and Medicare managed care.

**National Committee for Quality Assurance (NCQA)** – A national non-profit organization dedicated to improving health care quality. NCQA accredits and certifies a wide range of health care organizations, and produces HEDIS measures.

**Other Purchasers** – Commercial (employer-based insurance coverage) and Medicare managed care data (excludes dual eligibles insured through MHCP). Other Purchasers includes health plan data from commercial HMO/POS and some PPO products, plus Medicare Cost and Medicare Advantage.

**Self Pay** – Patients who pay for their own health care services.

## Appendix 7: Measure Definitions

### “Living with Illness” measures

**Optimal Diabetes Care** – Measures the percentage of patients with diabetes (Types 1 and 2) ages 18-75 who reached all five treatment goals to reduce the risk of cardiovascular diseases, including hemoglobin A1c (A1c) less than 7, blood pressure less than 130/80 mmHg, LDL-C less than 100 mg/dl, daily aspirin use (ages 41-75) and documented tobacco-free status.

**Controlling High Blood Pressure** – Measures the percentage of patients ages 18-85 with a diagnosis of hypertension whose blood pressure was adequately controlled at less than 140/90 mmHg during the measurement year. The representative blood pressure is the most recent blood pressure reading during the measurement year (as long as the reading occurred after the diagnosis of hypertension was made).

**Use of Appropriate Medications for People with Asthma** – Measures the percentage of patients ages 5-56 with persistent asthma in the measurement year and prior year who were appropriately prescribed medication during the measurement year.

### “Getting Better” measures

**Appropriate Treatment for Children with Upper Respiratory Infection** – Measures the percentage of children ages three months to 18 years with a diagnosis of upper respiratory infection (URI) who were not given an antibiotic prescription within three days of the episode period (July 1 of prior year to June 30 of measurement year). A higher rate represents better performance.

**Appropriate Testing for Children with Pharyngitis** – Measures the percentage of children ages 2-18 with pharyngitis (sore throats) who were given an antibiotic and a group A streptococcus (strep) test for the episode period (July 1 of prior year to June 30 of measurement year). A higher rate represents better performance.

### “Staying Healthy” measures

**Breast Cancer Screening** – Measures the percentage of women 52-69 who had a mammogram during the measurement year or prior year.

**Cervical Cancer Screening** – Measures the percentage of women ages 24-64 who received one or more Pap tests to screen for cervical cancer in the measurement year or the two years prior.

**Colorectal Cancer Screening** – Measures the percentage of adults ages 51-80 who had appropriate screening for colorectal cancer in the measurement year and prior year.

**Chlamydia Screening** – Measures the percentage of sexually active women aged 16-24 who had at least one test for Chlamydia infection during the measurement year.

**Childhood Immunization Status (Combo 3)** – Measures the percentage of children two years of age who had four DTaP/DT, three IPV, one MMR, three H influenza type B, three Hepatitis B, one VZV, and four pneumococcal conjugate vaccines within the HEDIS specified time period and by their second birthday.

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