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# MassHealth Managed Care HEDIS<sup>®</sup> 2010 Final Report

## **Prepared by:**

Center for Health Policy and Research (CHPR) in collaboration with the MassHealth Office of Acute and Ambulatory Care (OAAC) and the MassHealth Office of Behavioral Health (OBH)

## **Project Team:**

### **Center for Health Policy and Research**

Terri Costanzo  
Paul Kirby  
Ann Lawthers  
David Tringali  
Jen Vaccaro  
Rossana Valencia  
Jianying Zhang

### **Office of Acute and Ambulatory Care**

Sharon Hanson  
Marlene Kane  
Susan Maguire  
Mary Ann Mark  
Lana Miller  
Kate Staunton Rennie

### **MassHealth Office of Behavioral Health**

John DeLuca

### **Data Analysis and Performance Measurement**

Amina Khan  
Nicole Tibbetts

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## Executive Summary

The MassHealth Managed Care HEDIS® 2010 Report presents information on the quality of care provided by the five health plans serving the MassHealth managed care population (Boston Medical Center HealthNet Plan, Fallon Community Health Plan, Neighborhood Health Plan, Network Health, and the Primary Care Clinician Plan). This assessment was conducted by the MassHealth Office of Clinical Affairs (OCA), the MassHealth Office of Acute and Ambulatory Care (OAAC), the Center for Health Policy and Research (CHPR), and the MassHealth Office of Behavioral Health (OBH).

The data presented represent a subset of the Healthcare Effectiveness Data and Information Set (HEDIS) measures. HEDIS was developed by the National Committee for Quality Assurance (NCQA) and is the most widely used set of standardized performance measures to evaluate and report on the quality of care delivered by health care organizations. Through this collaborative project, OCA, OAAC, CHPR, and OBH have evaluated a broad range of clinical and service areas that are of importance to MassHealth members, policy makers and program staff.

### Measures Selected for HEDIS 2010

The MassHealth measurement set for 2010 focused on three domains: “staying healthy” (i.e., childhood immunization status, well child visits for infants and young children, adolescent well-care visits, and Chlamydia screening in women), “living with illness” (i.e., use of appropriate medications for people with asthma, antidepressant medication management, and follow-up after hospitalization for mental illness), “getting better” (i.e., appropriate use of antibiotics for upper respiratory infection), and the utilization of mental health services.

### Summary of Overall Results

Results from the MassHealth Managed Care HEDIS 2010 project demonstrate that MassHealth plans performed well overall when compared to the 2010 rates for other Medicaid plans around the country. Throughout this report, we will give results of tests of statistical significance comparing the performance of individual MassHealth plans with that of the top 25% of all Medicaid plans reporting HEDIS data for 2010 (represented by the 2010 national Medicaid 75th percentile, obtained from NCQA’s Quality Compass® database).

MassHealth plans performed best, relative to this national benchmark, on measures in the “staying healthy” domain. All five MassHealth plans reported rates that were significantly higher than the 2010 national Medicaid 75th percentile for the measures assessing well-child visits in the first 15 months of life; well-child visits in the 3rd, 4th, 5th, and 6th years of life; and adolescent well-care visits. MassHealth plan performance was also strong on the childhood immunization measure. All five plans met (i.e., were not statistically different from) the national benchmark, with one plan exceeding it for the Combination 2 vaccine, and two plans exceeding the benchmark for Combination 3.

Most MassHealth plans also performed well on measures assessing follow-up after hospitalization for mental illness and appropriate treatment for children with upper respiratory infection. Three plans reported significantly higher rates than the national benchmark for 7-day follow-up visits for mental illness while all five plans had significantly higher rates for 30-day follow-up visits. Of the five MassHealth plans, four plans exceeded the national benchmark for providing appropriate treatment to

children with upper respiratory infection, while one plan performed significantly below.

MassHealth plans’ results were mixed for several other measures, with some plans performing below the benchmark and others with no statistically significant difference. The measures assessing antidepressant medication management and use of appropriate medications for people with asthma follow this pattern with the exception of one age grouping (ages 5 to 11 years) for the asthma measure, which had one plan perform significantly better than the benchmark.

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Quality Compass® is a registered trademark of the National Committee for Quality Assurance (NCQA).*

## Executive Summary (*continued*)

### Childhood Immunization Status

- For Combination 2 (4 diphtheria-tetanus-pertussis, 3 injectable polio, 1 measles-mumps-rubella, 3 H influenza type B, 3 hepatitis B and 1 chicken pox vaccine by age 2), the overall MassHealth rate (i.e., the MassHealth weighted mean) was 82.7%.
- One MassHealth plan (NHP) performed significantly better than the 2010 national Medicaid 75th percentile for Combination 2.
- The MassHealth rate for Combination 3 (all Combination 2 immunizations plus 4 pneumococcal conjugate vaccines) was 79.2%.
- Two plans (NHP and FCHP) performed statistically better than the 2010 national Medicaid 75th percentile for Combination 3.
- Plan rates for 2010 were not significantly different from HEDIS 2008 rates for Combinations 2 and 3.

### Well-Child Visits in the First Fifteen Months of Life (0, 1, 2, 3, 4, 5, and 6 or more visits)

- Eighty-six percent (85.5%) of MassHealth members who turned 15 months of age during 2009 had six or more well-child visits.
- All five MassHealth plans performed significantly better than the 2010 national Medicaid 75th percentile for members with 6 or more visits.
- Plan rates for 2010 were not statistically different from HEDIS 2008 rates for all five plans.

### Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (at least one visit during 2009)

- The MassHealth rate of members ages three through six receiving at least one well-child visit was 85.5%.
- All five MassHealth plans performed significantly better than the 2010 national Medicaid 75th percentile.
- One plan's reported rate (PCCP) significantly improved from HEDIS 2008.

### Adolescent Well-Care Visits (at least one visit during 2009)

- Sixty-seven percent (66.7%) of MassHealth members aged 12-21 had at least one well-care visit.
- All five MassHealth plans performed significantly better than the 2010 national Medicaid 75th percentile.
- One plan's reported rate (PCCP) for 2010 significantly improved from HEDIS 2008.

### Chlamydia Screening in Women

- Sixty-seven percent (66.9%) of sexually active female members 16 to 24 years of age had at least one Chlamydia test during 2009.
- Three plans (NHP, NH, and BMCHP) performed significantly better than the 2010 national Medicaid 75th percentile for the combined age group (16 to 24 years).
- All five MassHealth plans had significantly higher rates compared to the Massachusetts commercial mean for each age group (16-20 years, 21-24 years, and 16-24 years).

### Use of Appropriate Medications for People with Asthma

- Eighty-eight percent (87.5%) of MassHealth members 5-50 years of age with persistent asthma were appropriately prescribed asthma control medication.
- None of the MassHealth plans performed significantly better than the 2010 national Medicaid 75th percentile for two of the three age group rates (12-50 years and 5-50 years).
- The percentage of MassHealth children (age 5-11 years) with persistent asthma who were appropriately prescribed medication was ninety-five percent (94.7%).
- One MassHealth plan (BMCHP) had a significantly better rate than the 2010 national Medicaid 75th percentile (5-11 years).

### Antidepressant Medication Management

- The MassHealth managed care rate for effective acute phase treatment was 49.4%. None of the five plans scored significantly higher than the national Medicaid 75th percentile, while, the rate for one plan (BMCHP) significantly improved from the 2008 report.
- The MassHealth managed care rate for effective continuation phase treatment was 33.6%. None of the five MassHealth plans significantly exceeded the national benchmark. One plan rate (BMCHP) significantly improved from 2008, while the rates for the remaining four plans did not show a significant change.

### Follow-up After Hospitalization for Mental Illness

- The MassHealth managed care 7-day follow-up rate was 58.3%. Three plans (NHP, NH, and BMCHP) had rates that were significantly better than the 2010 national Medicaid 75th percentile, while one plan (BMCHP) had a 2010 rate that was significantly better than their 2008 rate.
- The MassHealth managed care 30-day follow-up rate was 78.3%. All five MassHealth plans had rates that were significantly better than the 2010 national Medicaid 75th percentile. Four plans (PCCP, NH, NHP, and FCHP) had 2010 rates that were not significantly different than their 2008 rates.

### Appropriate Treatment for Children with Upper Respiratory Infection

- The overall MassHealth rate of appropriate use of antibiotics in children with upper respiratory infection was 92.6%.
- Four MassHealth plans (NHP, NH, FCHP, BMCHP) had rates that were significantly better than the 2010 national Medicaid 75th percentile.
- Two plans (PCCP and NH) had 2010 rates that were significantly better than their 2008 rates.

## Summary of MassHealth Managed Care HEDIS 2010 Results

HEDIS 2010 Measure	2010 National Medicaid 75 <sup>th</sup> Percentile	PCC Plan	NHP	NH	FCHP	BMCHP
<b>Childhood Immunization</b>						
Combination 2	81.5%	81.3%	86.1%↑	78.8%	85.7%	83.7%
Combination 3	76.9%	76.6%	83.9%↑	75.9%	84.0%↑	79.3%
<b>Well-Child Visits for Infants and Young Children</b>						
Well-Child Visits in First 15 Months of Life (6+ visits)	69.4%	91.2%↑	86.2%↑	81.1%↑	84.8%↑	84.8%↑
Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life	77.2%	84.8%↑	87.2%↑	86.0%↑	84.0%↑	84.7%↑
<b>Adolescent Well-Care Visits</b>						
Adolescent Well-Care Visits	55.9%	65.1%↑	67.6%↑	66.7%↑	59.1%↑	68.6%↑
<b>Chlamydia Screening in Women</b>						
16 to 20 Years	61.1%	61.4%	67.3%↑	63.2%↑	60.5%	65.3%↑
21 to 24 Years	69.1%	67.4%↓	76.7%↑	71.7%↑	69.3%	69.8%
Combined Ages 16 to 24 Years	63.7%	64.1%	71.3%↑	67.4%↑	64.6%	67.4%↑
<b>Use of Appropriate Medications for People with Asthma</b>						
Age 5 to 11 Years	93.9%	95.0%	94.5%	92.4%	92.5%	95.5%↑
Age 12 to 50 Years	89.1%	82.7%↓	86.3%↓	85.3%↓	84.4%	85.3%↓
Combined 5 to 50 Years	90.8%	85.6%↓	89.8%	88.0%↓	86.7%	89.3%↓

**Key:** PCC Plan—Primary Care Clinician Plan FCHP—Fallon Community Health Plan  
 NHP—Neighborhood Health Plan BMCHP—Boston Medical Center HealthNet Plan  
 NH—Network Health

↑ Indicates a rate that is significantly better than the 2010 national Medicaid 75th percentile.  
 ↓ Indicates a rate that is significantly worse than the 2010 national Medicaid 75th percentile.

## Summary of MassHealth Managed Care HEDIS 2010 Results (continued)

HEDIS 2010 Measure	2010 National Medicaid 75 <sup>th</sup> Percentile	PCC Plan	NHP	NH	FCHP	BMCHP
<b>Antidepressant Medication Management</b>						
Effective Acute Phase	53.2%	52.0%	48.1%↓	48.6%↓	62.0%	45.4%↓
Effective Continuation Phase	35.4%	36.1%	32.5%	31.0%↓	40.5%	30.9%↓
<b>Follow-up After Hospitalization for Mental Illness</b>						
7 Day	59.1%	54.3%↓	64.3%↑	64.0%↑	66.7%	68.3%↑
30 Day	74.3%	75.6%↑	81.3%↑	83.5%↑	91.7%↑	84.2%↑
<b>Appropriate Treatment for Children with Upper Respiratory Infection</b>						
Appropriate Treatment for URI	90.7%	89.0%↓	94.8%↑	94.7%↑	98.3%↑	94.6%↑

**Key:** PCC Plan—Primary Care Clinician Plan FCHP—Fallon Community Health Plan  
NHP—Neighborhood Health Plan BMCHP—Boston Medical Center HealthNet Plan  
NH—Network Health

↑ Indicates a rate that is significantly better than the 2010 national Medicaid 75th percentile.  
↓ Indicates a rate that is significantly worse than the 2010 national Medicaid 75th percentile.

# Introduction



# Introduction

## Purpose of the Report

This report presents the results of the MassHealth Managed Care Healthcare Effectiveness Data and Information Set (HEDIS) 2010 project. This report was designed to be used by MassHealth program managers and by managed care organization (MCO) managers to assess plan performance in the context of other MassHealth managed care plans and national benchmarks, identify opportunities for improvement, and set quality improvement goals.

## Project Background

The Center for Health Policy and Research (CHPR) collaborated with the MassHealth Office of Acute and Ambulatory Care (OAAC), the MassHealth Office of Behavioral Health (OBH), and the MassHealth Office of Clinical Affairs (OCA) to conduct an annual assessment of the performance of all MassHealth MCOs and the Primary Care Clinician Plan (PCC Plan), the primary care case management program administered by the Executive Office of Health and Human Services (EOHHS). CHPR, OAAC, OBH and OCA conduct this annual assessment by using a subset of HEDIS measures. Developed by the National Committee for Quality Assurance (NCQA), HEDIS is the most widely used set of standardized performance measures for reporting on the quality of care delivered by health care organizations. HEDIS includes clinical measures of care, as well as measures of access to care and utilization of services.

The measures selected for the MassHealth Managed Care HEDIS 2010 project assess the performance of the five MassHealth plans that provided health care services to MassHealth man-

aged care members during the 2009 calendar year. The five MassHealth plans included in this report are the Primary Care Clinician Plan (PCC Plan), Neighborhood Health Plan (NHP), Network Health (NH), Fallon Community Health Plan (FCHP), and Boston Medical Center HealthNet Plan (BMCHP). Descriptive information about each health plan can be found in the Health Plan Profiles section, beginning on page 10.

## MassHealth HEDIS 2010 Measures

MassHealth selected nine measures for the HEDIS 2010 project. The measures included in this report assess health care quality in three key areas: effectiveness of care, access and availability of care, and use of services.

The effectiveness of care measures included in this report provide information about preventive services and the management of chronic illness. The specific topics evaluated in this report are childhood immunization; appropriate treatment for children with upper respiratory infection; the use of appropriate medications for people with asthma; antidepressant medication management; chlamydia screening for women; and follow up after hospitalization for mental illness.

The access and availability of care measures included in this report provide information about the ability of members to get the basic and important services they need. The specific topics evaluated include well-child visits in the first fifteen months of life; well-child visits in the third, fourth, fifth and sixth years of life; and adolescent well-care visits.

Finally, the use of services measure evaluated in this report, Mental Health Utilization, provides

information about what services health plan members utilize. Health care utilization is affected by member characteristics such as age, sex, comorbidities, and socioeconomic status, all of which could vary across plans. The use of services data included in this report are stratified by age and gender, but are not adjusted for any other member characteristics such as comorbidity.



## Organization of the MassHealth Managed Care HEDIS 2010 Report

This report presents the results of the MassHealth Managed Care HEDIS 2010 project in four sections. Three of the sections are based on the consumer reporting domains used in NCQA's Health Plan Report Cards (Staying Healthy, Living with Illness, and Getting Better). These three domains include a variety of HEDIS measures dealing with effectiveness of care, and with access to/availability of care. The fourth section (Use of Services) includes data on the utilization of mental health services.

REPORT SECTION	DEFINITION	MEASURES SELECTED BY MASSHEALTH FOR HEDIS 2010 REPORTING
Staying Healthy	These measures provide information about how well a plan provides services that maintain good health and prevent illness.	Childhood Immunization Status Well-Child Visits in the First 15 Months of Life Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life Adolescent Well-Care Visits Chlamydia Screening for Women
Living with Illness	These measures provide information about how well a plan helps people manage chronic illness.	Use of Appropriate Medications for People with Asthma Antidepressant Medication Management Follow-up After Hospitalization for Mental Illness Mental Health Utilization
Getting Better	This measure provides information about how well a plan helps people recover from illness.	Appropriate Treatment for Children with URI
Use of Services	This measure provides information about what services health plan members utilize.	Mental Health Utilization

This report also includes several appendices that provide more detailed results:

- **Appendix A** includes a list of the MassHealth regions and the service areas the regions cover.
- **Appendix B** includes plan rates for Childhood Immunization combinations 4-10 (new vaccine combinations added to HEDIS 2010).
- **Appendix C** presents plan rates for individual Childhood Immunizations (e.g., MMR, DTaP, hepatitis B, etc.).
- **Appendix D** includes the 0 visit, 1 visit, 2 visit, 3 visit, 4 visit and 5 visit rates for the Well-Child Visit in the First 15 Months of Life measure.
- **Appendix E** presents data for the Antidepressant Medication Management measure for PCC Plan members with Basic, Essential and Non-Basic/Non-Essential coverage.
- **Appendix F** presents data for the Follow-up After Hospitalization for Mental Illness measure for PCC Plan members with Basic, Essential and Non-Basic/Non-Essential coverage.
- **Appendix G** includes age stratified rates for the Mental Health Utilization measures (percentage of members using services) for PCC Plan members with Basic, Essential, or Non-Basic/Non-Essential coverage.
- **Appendix H** presents age and gender stratified rates for the Mental Health Utilization measures for all plans (percentage of members using services).

# Organization of the MassHealth Managed Care HEDIS 2010 Report

Name of measure

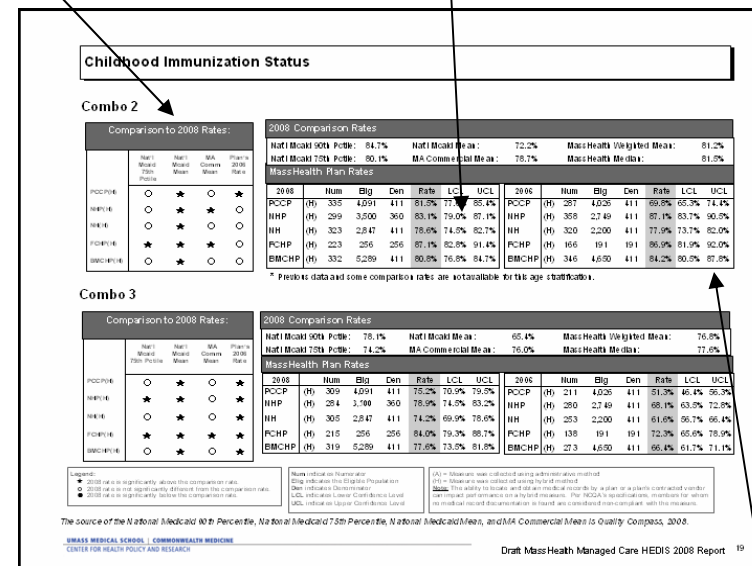
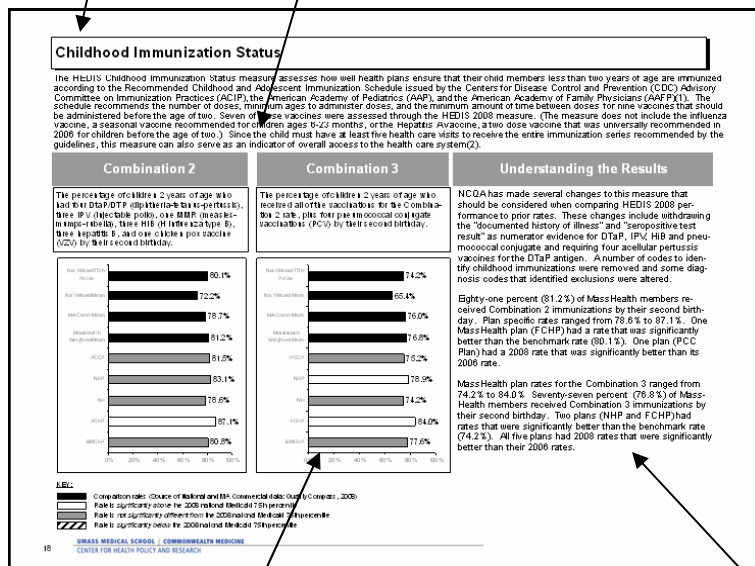
Information on the intent of each measure, including any clinical guidelines on which it is based

Statistical summary comparing plan rates to comparison rates named at the top of each column

- ★ 2010 rate is significantly above the comparison rate
- 2010 rate is not significantly different from the comparison rate
- 2010 rate is significantly below the comparison rate

Individual HEDIS 2010 plan data including numerator, eligible population (where applicable) denominator, reported rate, and upper and lower confidence intervals

The 2010 national Medicaid 75th percentile is listed as a benchmark. The 2010 national Medicaid 90th percentile, 2010 national Medicaid mean, 2010 Massachusetts Commercial mean, and 2010 MassHealth weighted mean and median are listed as comparison rates



Comparison of plan rates with the comparison and benchmark data

Analysis of results, including opportunities for improvement

Historical data from HEDIS 2008

## Health Plan Profiles

MassHealth managed care plans provided care to 751,260 Massachusetts residents as of December 31, 2009. The MassHealth Managed Care HEDIS 2010 report includes data from the five MassHealth plans serving members enrolled in Managed Care as of that date. This report does not reflect care provided to MassHealth members receiving their health care services outside of the five managed care plans.

The following profiles provide some basic information about each plan and its members. The data chart on the next page provides a statistical summary of the demographic characteristics of each plan's population. Appendix A lists the service areas that are located within each MassHealth geographic region listed below. (NOTE: The term "MCOs" is used throughout the report to indicate the four capitated managed care plans serving MassHealth members —Neighborhood Health Plan, Network Health, Fallon Community Health Plan, and Boston Medical Center HealthNet Plan. A fifth plan, Health New England, began enrolling MassHealth Managed Care members after December 31, 2009, and therefore will not be included in the HEDIS 2010 report.)

### Primary Care Clinician Plan (PCC Plan)

- Primary care case management program administered by the Executive Office of Health and Human Services (EOHHS).
- Statewide managed care option for MassHealth members eligible for managed care.
- 307,562 MassHealth members as of December 31, 2009.
- Provider network includes group practices, community health centers, hospital outpatient departments, hospital-licensed health centers, and individual practitioners.
- Behavioral health services are managed through a carve-out with the Massachusetts Behavioral Health Partnership (MBHP).
- HEDIS data for the PCC Plan include all coverage types, including MassHealth Essential, which covers individuals ages 19-64 who are long-term unemployed and ineligible for Mass-

Health Basic (certain individuals with non-citizen status are also eligible). During the measurement period (2009), the PCC Plan was the only MassHealth plan enrolling members with Essential coverage. Approximately 23.5% of the PCC Plan's membership has MassHealth Essential coverage.

### Neighborhood Health Plan (NHP)

- Non-profit managed care organization that primarily serves Medicaid members, along with commercial and Commonwealth Care populations.
- 137,864 MassHealth members as of December 31, 2009.
- Service areas throughout the state (Western, Central, Northern and Southern Massachusetts as well as Greater Boston).
- Provider network includes mostly community health centers in addition to Harvard Vanguard Medical Associates, group practices, and hospital-based clinics.
- Behavioral health services are managed through a carve-out contract with Beacon Health Strategies.

### Network Health (NH)

- Provider-sponsored health plan owned and operated by Cambridge Health Alliance that serves the Medicaid and Commonwealth Care populations.
- 111,067 MassHealth members as of December 31, 2009.
- Primary service areas in Western, Northern and Central Massachusetts, and Greater Boston.
- Provider network includes community health centers, group practices, hospital outpatient departments, and individual practitioners.
- Behavioral health services provided by Network Health providers.

### Fallon Community Health Plan (FCHP)

- Non-profit managed care organization that serves commercial, Medicare, Medicaid and Commonwealth Care populations.
- 12,023 MassHealth members as of December 31, 2009.
- Service area is in Central Massachusetts.
- Behavioral health services are managed through a carve-out contract with Beacon Health Services.
- Provider network for MassHealth members is exclusively through Fallon Clinic sites.

### Boston Medical Center HealthNet Plan (BMCHP)

- Provider-sponsored health plan, owned and operated by Boston Medical Center, the largest public safety-net hospital in Boston, that serves the Medicaid and Commonwealth Care populations.
- 182,744 MassHealth members as of December 31, 2009.
- Primary service areas in Western and Southern Massachusetts and Greater Boston.
- Provider network includes community health centers, hospital outpatient departments, and group and individual practices.
- Behavioral health services provided by Boston Medical Center HealthNet Plan providers.

### Differences in Populations Served by Mass-Health Plans

HEDIS measures are not designed for case-mix adjustment. Rates presented here do not take into account the physical and mental health status (including disability status) of the members included in the measures.

The data on the next page describe each plan's population in terms of age, gender, and disability status. It is important for readers to consider the differences in the characteristics of each plan's population when reviewing and comparing the HEDIS 2010 performance of the five plans.

## Health Plan Profiles: Demographic Characteristics of the Plan Populations

MassHealth Plan	Total MassHealth Managed Care Members as of 12/31/09	Female	Disabled	Mean Age	0-11 yrs	12-17 yrs	18-39 yrs	40-64 yrs	65+ yrs**
Primary Care Clinician Plan*									
Without Essential population	235,371	55.6%	29.1%	25.4	29.8%	16.0%	26.6%	27.6%	0.0%
Essential population only	72,191	31.2%	0.0%	37.3	0.0%	0.0%	56.7%	43.3%	0.0%
Neighborhood Health Plan	137,864	59.2%	5.8%	18.1	43.4%	16.8%	27.2%	12.6%	0.0%
Network Health	111,067	57.7%	7.5%	17.8	45.7%	15.2%	26.5%	12.6%	0.0%
Fallon Community Health Plan	12,023	58.4%	9.1%	20.1	38.3%	16.0%	30.7%	15.0%	0.0%
Boston Medical Center HealthNet Plan	182,744	58.3%	10.9%	18.0	44.7%	15.9%	26.6%	12.7%	0.0%
<b>Total for MassHealth Managed Care Program</b>	<b>751,260</b>	<b>55.0%</b>	<b>14.1%</b>	<b>22.2</b>	<b>35.6%</b>	<b>14.5%</b>	<b>29.7%</b>	<b>20.3%</b>	<b>0.0%</b>

Source: MMIS

\* HEDIS results based on the entire PCC Plan population (including Essential) are compared to MCO results throughout the main body of the report.

\*\* MassHealth managed care plans generally serve members under the age of 65. In previous years, a small number of MassHealth managed care members were 65 years of age or older as of December 31st of the measurement year, and had not yet had their coverage terminated. For HEDIS 2010, no such members were identified through enrollment data, which was used to generate these health plan profiles. However, as a rule, any MassHealth members 65 years and older would be included in the eligible populations for the HEDIS 2010 measures whenever the specifications for the measure included the 65 and older population, the members' coverage was not yet terminated, and the members met all eligible population criteria such as the continuous enrollment and enrollment anchor date requirements.

### Statistically Significant Differences Among the Plans

**Female Members:** All four MCOs had a significantly higher proportion of female members than PCC Plan ( $p < .0001$ ). NHP had a significantly higher proportion of female members than BMCHP and NH ( $p < .0001$ ).

**Disabled Members:** PCC Plan had a significantly higher proportion of disabled members than any of the four MCOs ( $p < .0001$ ). All differences among the MCOs are also significant ( $p < .0001$ ).

**Mean Age of Members:** All four MCOs had a population whose mean age was significantly lower than that of PCC Plan ( $p < .0001$ ). FCHP's population had a mean age that was significantly higher than that of BMCHP, NHP, and NH ( $p < .0001$ ).

# Data Collection and Analysis Methods

## Data Collection and Submission

In November 2009, the MassHealth Office of Acute and Ambulatory Care (OAAC) provided plans with a list of measures to be collected for HEDIS 2010. The list of measures was developed by key stakeholders within MassHealth, including stakeholders within OAAC, the Office of Clinical Affairs (OCA), and the MassHealth Office of Behavioral Health (OBH). In general, each plan was responsible for collecting the measures according to the HEDIS 2010 Technical Specifications and for reporting the results using NCQA's Interactive Data Submission System (IDSS). Each plan submitted its results to both NCQA and CHPR.

While MassHealth does not require plans to have their HEDIS data audited, the data submitted by the four NCQA-accredited MassHealth MCOs covered in this report have undergone an NCQA HEDIS Compliance Audit™. The purpose of the audit is to validate a plan's HEDIS results by verifying the integrity of the plan's data collection and calculation processes. NCQA reports only audited data in the Quality Compass, a database of regional and national Medicaid, Medicare and Commercial performance benchmarks.

## Eligible Population

For each HEDIS measure, NCQA specifies the eligible population by defining the age, continuous enrollment, enrollment gap, and diagnosis or event criteria that a member must meet to be eligible for a measure.

**Age:** The age requirements for Medicaid HEDIS measures vary by measure. The MassHealth

managed care programs serves members under the age of 65. Occasionally, members 65 and older may appear in the denominator of a MassHealth plan's HEDIS rate. This may occur for several valid reasons, including instances where a member turns 65 during the measurement year and did not yet have their coverage terminated as of the measure's anchor date. MassHealth plans are responsible for a member's care until his or her coverage is terminated. Therefore, MassHealth members 65 years and older were included in the eligible populations for the HEDIS 2010 measures whenever the specifications for the measure included the 65 and older population, the members' coverage had not yet been terminated and the members met all eligible criteria such as continuous enrollment and enrollment anchor date requirements.

**Continuous enrollment:** The continuous enrollment criteria varies for each measure and specifies the minimum amount of time that a member must be enrolled in a MassHealth plan before becoming eligible for that plan's HEDIS measure. Continuous enrollment ensures that a plan has had adequate time to deliver services to the member before being held accountable for providing those services.

**Enrollment gap:** The specifications for most measures allow members to have a gap in enrollment during the continuous enrollment period and still be eligible for the measure. The allowable gap is specified for each measure but is generally defined for the Medicaid population as one gap of up to 45 days.

**Diagnosis/event criteria:** Some measures require a member to have a specific diagnosis or health

care event to be included in the denominator. Diagnoses are defined by specific administrative codes (e.g., ICD-9, CPT). Other health care events may include prescriptions, hospitalizations, or outpatient visits.

The measure descriptions included in this report do not include every requirement for the eligible populations (e.g., enrollment gaps). For complete specifications for each measure included in this report, please see *HEDIS 2010 Volume 2: Technical Specifications*.

## MassHealth Coverage Types Included in HEDIS 2010

MassHealth has several Medicaid coverage types whose members are eligible to enroll in any of the five MassHealth plans including Basic, Standard, CommonHealth, and Family Assistance. One coverage type, MassHealth Essential, was only allowed to enroll in the PCC Plan during the measurement period (2009). MassHealth Essential covers individuals ages 19-64 who are long-term unemployed and ineligible for MassHealth Basic (certain individuals with non-citizen status are also eligible). Approximately 23.5 percent of the PCC Plan's membership has MassHealth Essential coverage.

During the planning for the MassHealth Managed Care HEDIS 2010 project, it was decided that for certain measures, the PCC Plan would submit separate sets of HEDIS 2010 data for members with Essential and Basic coverage, in addition to data for the full PCC Plan population. The data for the full PCC Plan population is used in all tables and charts in the main body of the report. Separate rates for PCC Plan members with Es-

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## Data Collection and Analysis Methods (*continued*)

essential or Basic coverage are included in the appendices for several adult measures (appendices E, F, and G). For comparison, these appendices include rates for all PCC Plan members not covered by Essential or Basic.

### Administrative vs. Hybrid Data Collection

HEDIS measures are collected through one of two data collection methods—the administrative method or the hybrid method.

The **administrative method** requires plans to identify the denominator and numerator using claims or encounter data, or data from other administrative databases. Plans calculate the administrative measures using programs developed by plan staff or Certified HEDIS Software<sup>SM</sup> purchased from a vendor. For measures collected through the administrative method, the denominator includes all members who satisfy all criteria specified in the measure including any age or continuous enrollment requirements (these members are known as the “eligible population”). The plan’s HEDIS rate is based on all members in the denominator who are found through administrative data to have received the service reported in the numerator (e.g., visit, treatment, etc.).

The **hybrid method** requires plans to identify the numerator through both administrative and medical record data. Plans may collect medical record data using plan staff and a plan-developed data collection tool. Plans may also contract with a vendor for the tool, staffing, or both. For measures collected using the hybrid method, the denominator consists of a systematic sample of members drawn from the

measure’s eligible population. This systematic sample generally consists of a minimum required sample size of 411 members plus an over sample determined by the plan to account for valid exclusions and contraindications. The measure’s rate is based on members in the sample (411) who are found through either administrative or medical record data to have received the service reported in the numerator. Plans may report data with denominators smaller than 411 for two reasons: 1) the plan had a small eligible population or 2) the plan reduced its sample size based on its current year’s administrative rate or the previous year’s audited rate, according to NCQA’s specifications.

### Data Analysis

Throughout this report, HEDIS 2010 results from each plan are compared to several benchmarks and comparison rates, including the 2010 national Medicaid mean and the 2010 Massachusetts Commercial mean. In addition, MassHealth medians and weighted means were calculated from 2010 data.

#### 2010 National Medicaid 75<sup>th</sup> Percentile

For this report, the 2010 national Medicaid 75th percentile serves as the primary benchmark to which plan performance is compared (including statistical significance).

CHPR obtained the 2010 national Medicaid data through NCQA’s Quality Compass. NCQA releases Quality Compass in July of each year with the rates for Commercial and Medicare plans. NCQA provides the national Medicaid data in a supplement that is released in the fall.

### Other Comparison Rates Included in this Report

The other comparison rates included in the data tables of this report are the 2010 national Medicaid mean, 2010 national Medicaid 90th percentile, 2010 Massachusetts Commercial mean, 2010 MassHealth weighted mean, and 2010 MassHealth median.

The 2010 national Medicaid mean is the average performance of all Medicaid plans that submitted HEDIS 2010 data. The 2010 national Medicaid 90th percentile represents a level of performance that was exceeded by only the top 10% of all Medicaid plans that submitted HEDIS 2010 data. The 2010 national Medicaid 90th percentile was included as a future goal for MassHealth plans. The 2010 Massachusetts Commercial mean is the average performance of all Massachusetts Commercial plans that submitted HEDIS 2010 data. Although the populations served by Massachusetts Commercial plans differ from the population served by MassHealth, the Massachusetts Commercial mean may be an appropriate future goal for measures where MassHealth plans are nearing or exceeding the national Medicaid 90th percentile.

The 2010 MassHealth weighted mean is a weighted average of the rates of the five MassHealth plans. The weighted average was calculated by multiplying the performance rate for each plan by the number of members who met the eligibility criteria for the measure. The values were then summed across plans and divided by the total eligible population for all the plans. The largest MassHealth plan (PCC Plan) serves 40.9% of all MassHealth members, and the smallest (FCHP) serves only 1.6%. Because of the differences in the size of the populations

*Certified HEDIS Software<sup>SM</sup> is a service mark of the National Committee for Quality Assurance (NCQA).*

## Data Collection and Analysis Methods (*continued*)

served by the plans, the MassHealth weighted mean was not used for tests of statistical significance.

The 2010 MassHealth median is also provided and is the middle value of the set of values represented by the individual plan rates.

### Caveats for the Interpretation of Results

All data analyses have limitations and those presented here are no exception.

#### Medical Record Procurement

A plan's ability (or that of its contracted vendor) to locate and obtain medical records as well as the quality of medical record documentation can affect performance on hybrid measures. Per NCQA's specifications, members for whom no medical record documentation was found were considered non-compliant with the measure. This applied to records that could not be located and obtained as well as for medical records that contained incomplete documentation (e.g., indication of a test but no date or result).

#### Lack of Case-Mix Adjustment

The specifications for collecting HEDIS measures do not allow case-mix adjustment or risk-adjustment for existing co-morbidities, disability (physical or mental), or severity of disease. Therefore, it is difficult to determine whether differences among plan rates were due to differences in the quality of care or use of services, or differences in the health of the populations served by the plans.

#### Demographic Differences in Plan membership

In addition to disability status, the populations served by each plan may have differed in other demographic characteristics such as age, gender,

and geographic residence. As shown in the plan profile chart on page 11, the PCC Plan has a higher proportion of members who are male or disabled, as well as an older mean member age. Other differences among the plans are noted on page 11. The impact of these differences on MassHealth HEDIS 2010 rates is unknown.

#### Overlapping Provider Networks

Many providers caring for MassHealth members have contracts with multiple plans. Overlapping provider networks may affect the ability of any one plan to influence provider behavior.

#### Variation in Data Collection Procedures

Each plan collects and reports its own HEDIS data. Although there are standard specifications for collecting HEDIS measures, MassHealth does not audit the plans' data collection methods. Factors that may influence the collection of HEDIS data by plan include:

- Use of software to calculate the administrative measures,
- Use of a tool and/or abstractors from an external medical record review vendor,
- Completeness of administrative data due to claims lags,
- Amount of time in the field collecting medical record data,
- The overall sample size for medical record review (plans with small eligible populations could have samples smaller than 411 members),
- Staffing changes among the plan's HEDIS team,
- Review by an NCQA-Certified HEDIS auditor,
- Choice of administrative or hybrid data collection method for measures that allow either method.

#### Limitation of Certain HEDIS Measures

One measure collected in 2010, Mental Health Utilization, provides information on the services MassHealth members utilized and not on the content or quality of the care the members received. MassHealth HEDIS mental health utilization data are not case-mix or risk adjusted. Differences in plan utilization rates cannot be interpreted as a measure of quality (i.e., it cannot be determined whether a plan with a higher discharge rate or longer average length of stay is providing either good or bad quality of care). Therefore, readers are cautioned against using utilization data to make judgments about the quality of the care delivered by a plan or its providers.

In addition, MassHealth HEDIS mental health utilization data differ from utilization data calculated through other methods used by MassHealth. Readers are cautioned against making direct comparisons between HEDIS mental health utilization data and mental health utilization data obtained from other sources.



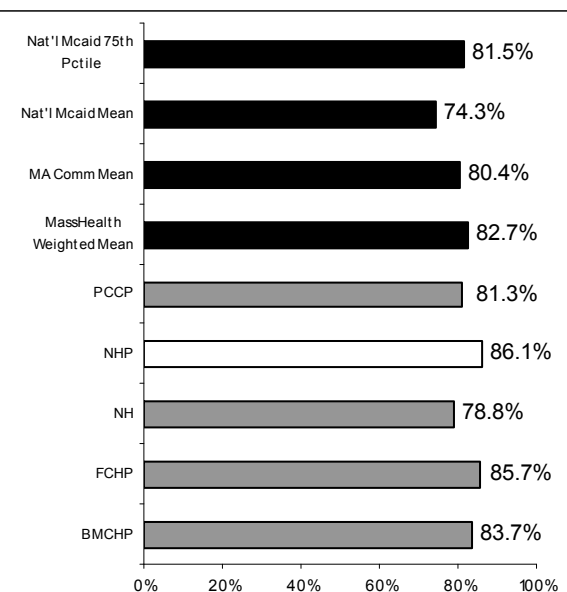
# Staying Healthy

# Childhood Immunization Status

The HEDIS Childhood Immunization Status measure assesses how well health plans ensure that their child members less than two years of age are immunized, following the Recommended Childhood and Adolescent Immunization Schedule issued by the Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP).<sup>1</sup> The schedule recommends the number of doses, minimum ages to administer doses, and the minimum amount of time between doses for ten vaccines that should be administered before the age of two. Ten of those vaccines were assessed through the HEDIS 2010 measure. Since the child must have at least five health care visits to receive the entire immunization series recommended by the guidelines, this measure can also serve as an indicator of overall access to the health care system.<sup>2</sup>

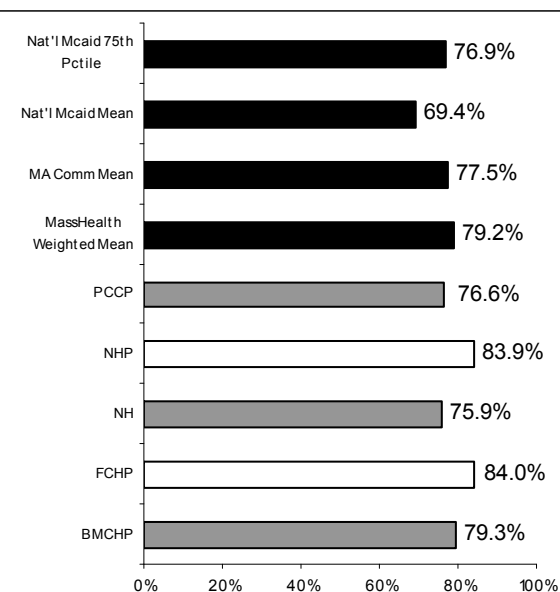
## Combination 2

The percentage of children 2 years of age who had four DTaP/DTP (diphtheria-tetanus-pertussis), three IPV (injectable polio), one MMR (measles-mumps-rubella), three HiB (H influenza type B), three hepatitis B, and one VZV (chicken pox) on or before their second birthday.



## Combination 3

The percentage of children 2 years of age who received all of the vaccinations for the Combination 2 rate, plus four pneumococcal conjugate vaccinations (PCV) on or before their second birthday.



## Understanding the Results

NCQA added hepatitis A, rotavirus, and influenza vaccines to this measure for HEDIS 2010. The inclusion of these three additional vaccines means that there are now seven new combination vaccines (Combinations 4-10). NCQA did not provide national benchmark data for these new combinations, however, so plan rates for Combinations 4-10 are shown in Appendix B. These changes will not affect the comparability of rates for Combinations 2 and 3 to previous years.

Eighty-three percent (82.7%) of MassHealth members received Combination 2 immunizations by their second birthday. Plan specific rates ranged from 78.8% to 86.1%. One plan (NHP) had a significantly higher rate than the benchmark rate of 81.5%, which represents the national Medicaid 75<sup>th</sup> percentile. Plan specific Combination 2 rates for 2010 did not significantly differ from 2008.

Seventy-nine percent (79.2%) of MassHealth members received Combination 3 immunizations by their second birthday. MassHealth plan rates for Combination 3 ranged from 75.9% to 84.0%. Two plans (NHP and FCHP) had significantly higher rates than the national Medicaid 75<sup>th</sup> percentile benchmark (76.9%). Plan rates for 2010 did not significantly differ from 2008.

### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is significantly above the 2010 national Medicaid 75th percentile
- Rate is not significantly different from the 2010 national Medicaid 75th percentile
- Rate is significantly below the 2010 national Medicaid 75th percentile

# Childhood Immunization Status

## Statistical Summary — Combo 2

Comparison to Benchmarks:				
	Nat'l Medicaid 75th Pctile	Nat'l Medicaid Mean	MA Commercial Mean	Plan's 2008 Rate
PCCP(H)	○	★	○	○
NHP(H)	★	★	★	○
NH(H)	○	★	○	○
FCHP(H)	○	★	★	○
BMCHP(H)	○	★	○	○

2010 Comparison Rates															
Nat'l Mcaid 90th Pctile: 85.6%				Nat'l Mcaid Mean: 74.3%				MassHealth Weighted Mean: 82.7%							
Nat'l Mcaid 75th Pctile: 81.5%				MA Commercial Mean: 80.4%				MassHealth Median: 83.7%							
MassHealth Plan Rates															
2010		Num	Elig	Den	Rate	LCL	UCL	2008		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	334	4,029	411	81.3%	77.4%	85.2%	PCCP	(H)	335	4,091	411	81.5%	77.6%	85.4%
NHP	(H)	354	4,360	411	86.1%	82.7%	89.6%	NHP	(H)	299	3,500	360	83.1%	79.0%	87.1%
NH	(H)	324	3,978	411	78.8%	74.8%	82.9%	NH	(H)	323	2,847	411	78.6%	74.5%	82.7%
FCHP	(H)	251	294	293	85.7%	81.5%	89.8%	FCHP	(H)	223	256	256	87.1%	82.8%	91.4%
BMCHP	(H)	344	6,035	411	83.7%	80.0%	87.4%	BMCHP	(H)	332	5,289	411	80.8%	76.8%	84.7%

## Statistical Summary — Combo 3

Comparison to Benchmarks:				
	Nat'l Medicaid 75th Pctile	Nat'l Medicaid Mean	MA Commercial Mean	Plan's 2008 Rate
PCCP(H)	○	★	○	○
NHP(H)	★	★	★	○
NH(H)	○	★	○	○
FCHP(H)	★	★	★	○
BMCHP(H)	○	★	○	○

2010 Comparison Rates															
Nat'l Mcaid 90th Pctile:				82.0%		Nat'l Mcaid Mean:			69.4%		MassHealth Weighted Mean:			79.2%	
Nat'l Mcaid 75th Pctile:				76.9%		MA Commercial Mean:			77.5%		MassHealth Median:			79.3%	
MassHealth Plan Rates															
2010		Num	Elig	Den	Rate	LCL	UCL	2008		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	315	4,029	411	76.6%	72.4%	80.9%	PCCP	(H)	309	4,091	411	75.2%	70.9%	79.5%
NHP	(H)	345	4,360	411	83.9%	80.3%	87.6%	NHP	(H)	284	3,500	360	78.9%	74.5%	83.2%
NH	(H)	312	3,978	411	75.9%	71.7%	80.2%	NH	(H)	305	2,847	411	74.2%	69.9%	78.6%
FCHP	(H)	246	294	293	84.0%	79.6%	88.3%	FCHP	(H)	215	256	256	84.0%	79.3%	88.7%
BMCHP	(H)	326	6,035	411	79.3%	75.3%	83.4%	BMCHP	(H)	319	5,289	411	77.6%	73.5%	81.8%

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

### Num indicates Numerator

Elig indicates the Eligible Population  
Den indicates Denominator  
LCL indicates Lower Confidence Level  
UCL indicates Upper Confidence Level

### (H) = Measure was collected using hybrid method

**Note:** The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant with the measure.

The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2010.

# Childhood Immunization Status

## Understanding the Results (continued)

Although the HEDIS Childhood Immunization Status measure is an important indicator of the quality of preventive care delivered by a health plan, the measure does have some limitations. For example, HEDIS does not assess the timeliness of immunization delivery with regard to the recommended age intervals for vaccination. Some research suggests that many children who are compliant with the HEDIS childhood immunization measure do not receive immunizations on-time.<sup>3</sup> Another limitation is the exclusion of members who are not continuously enrolled. In order to be included in the measure (the denominator), members must be continuously enrolled in a plan for twelve months prior to their second birthday. Members who are excluded because they do not meet this continuous enrollment criterion may be at risk for low immunization rates and missed immunizations.<sup>4</sup> Therefore, this measure may not be a good indicator of the quality of care delivered to MassHealth members who are at the greatest risk of poor immunization coverage.

HEDIS childhood immunization rates are usually lower than state and national childhood immunization rates reported through other data sources such as the National Immunization Survey (NIS) and National Health Information Survey (NHIS).<sup>5</sup> Differences in reported immunization coverage rates is believed to be due in part by different continuous enrollment criteria and immunization schedule requirements (i.e., the number and timing of doses). (For example, when HEDIS criteria were applied to NIS data, the immunization coverage rate fell by approximately 20%).<sup>6</sup>

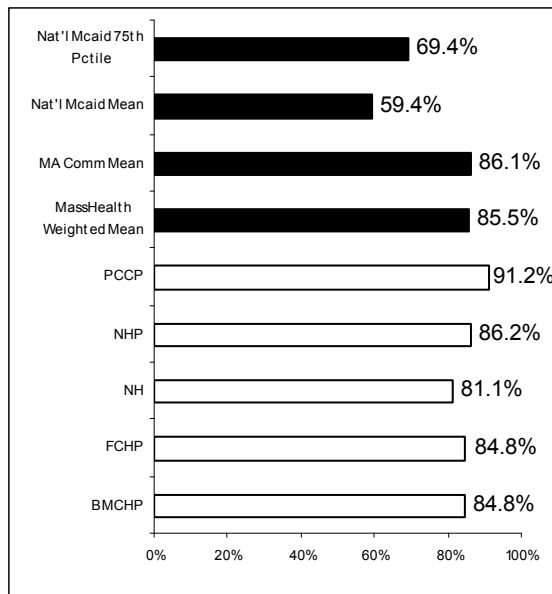
Although Massachusetts has one of the highest immunization coverage rates in the United States,<sup>7</sup> opportunity for improvement still exists. The immunizations required by the Combination 2 rate are consistent with those defined by Healthy People 2010. The Healthy People 2010 childhood immunization goal of 90% may represent a target for continued improvement on this measure. Increased attention to areas measured by HEDIS at the expense of other non-measured preventive services, such as those addressed in other Healthy People 2010 goals, could have the unintended effect of reducing the overall quality of preventive care (i.e., if non-measured services are neglected).<sup>8</sup> Nonetheless, since childhood and adolescent immunization are two of the most cost-effective practices of all areas assessed through HEDIS,<sup>9</sup> greater efforts at improving immunization rates could yield benefits to both plans and the members they serve.

# Well-Child Visits for Infants and Young Children

The HEDIS Well-Child Visits measure assesses whether infants and young children receive the number of well-child visits recommended by current clinical guidelines. The American Academy of Pediatrics (AAP) recommends a schedule of nine well-child visits between birth and the first 15 months of life.<sup>10</sup> The AAP also recommends a schedule of annual well-child visits during the 3rd, 4th, 5th and 6th years of life. These well-child visits offer the opportunity for evaluation of growth and development, the administration of vaccinations, the assessment of behavioral issues, and delivery of anticipatory guidance on such issues as injury prevention, violence prevention, sleep position and nutrition. The HEDIS well-child visit measures assess only the frequency of well-child visits. They provide no information on the content or quality of care received during those visits. However, compliance with the preventative care guidelines, including the recommended number of visits, can improve health outcomes; for example, Medicaid-enrolled children under the age of 2 who receive well-child visits according to the frequency prescribed by the AAP have fewer avoidable hospitalizations.<sup>11</sup>

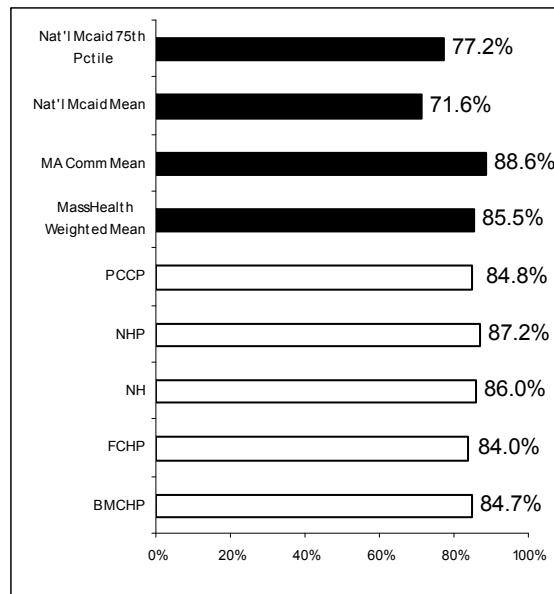
## Well-Child Visits in the First 15 Months of Life (6+ visits)

The percentage of members who turned 15 months old during 2009 and who had six or more well-child visits with a primary care practitioner during the first 15 months of life.



## Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life

The percentage of members who were three, four, five or six years old during 2009 who received one or more well-child visits with a primary care practitioner during 2009.



## Understanding the Results

For HEDIS 2010, NCQA added an additional procedure code to identify well-child visits in each plan. This change should be considered when comparing HEDIS 2010 results to prior rates.

Eighty-six percent (85.5%) of MassHealth members who turned 15 months during the measurement year had six or more well-child visits during their first 15 months of life. Rates for each plan ranged from 81.1% to 91.2%. All five MassHealth Plans (PCCP, NHP, NH, FCHP, and BMCHP) had significantly higher rates than the benchmark (69.4%), the national Medicaid 75<sup>th</sup> percentile. However, plan rates were not significantly different from their 2008 rates.

Similarly, eighty-six percent (85.5%) of MassHealth members who were three, four, five, or six years old during the measurement year received one or more well-child visits during 2009. Rates for each plan ranged from 84.0% to 87.2%. All five MassHealth plans had significantly higher rates compared to the national Medicaid 75<sup>th</sup> percentile benchmark of 77.2%. One plan's rate (PCCP) significantly improved from 2008, while four plans (NHP, NH, FCHP, and BMCHP) remained statistically unchanged.

### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile

\* Data for the zero through five visit rates are in Appendix C.

# Well-Child Visits for Infants and Young Children

## Statistical Summary — Well-Child Visits in the First 15 Months of Life (6+ visits)

Comparison to Benchmarks:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
PCCP(H)	★	★	★	○
NHP(H)	★	★	○	○
NH(H)	★	★	●	○
FCHP(H)	★	★	○	○
BMCHP(H)	★	★	○	○

2010 Comparison Rates																
Nat'l Mcaid 90th Pctile:		76.3%		Nat'l Mcaid Mean:		59.4%		MassHealth Weighted Mean:		85.5%						
Nat'l Mcaid 75th Pctile:		69.4%		MA Commercial Mean:		86.1%		MassHealth Median:		84.8%						
MassHealth Plan Rates																
2010		Num	Elig	Den	Rate	LCL	UCL		2008		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	228	2,681	250	91.2%	87.5%	94.9%	PCCP	(H)	209	3,251	240	87.1%	82.6%	91.5%	
NHP	(H)	224	3,457	260	86.2%	81.8%	90.5%	NHP	(H)	228	3,003	279	81.7%	77.0%	86.4%	
NH	(H)	305	3,061	376	81.1%	77.0%	85.2%	NH	(H)	326	2,587	411	79.3%	75.3%	83.4%	
FCHP	(A)	190	224	224	84.8%	79.9%	89.7%	FCHP	(H)	159	212	209	76.1%	70.1%	82.1%	
BMCHP	(H)	229	5,072	270	84.8%	80.3%	89.3%	BMCHP	(H)	319	4,497	411	77.6%	73.5%	81.8%	

## Statistical Summary — Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life

Comparison to Benchmarks:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
PCCP(A)	★	★	●	★
NHP(H)	★	★	○	○
NH(H)	★	★	○	○
FCHP(H)	★	★	○	○
BMCHP(H)	★	★	○	○

2010 Comparison Rates																
Nat'l Mcaid 90th Pctile:		82.5%		Nat'l Mcaid Mean:		71.6%		MassHealth Weighted Mean:		85.5%						
Nat'l Mcaid 75th Pctile:		77.2%		MA Commercial Mean:		88.6%		MassHealth Median:		84.8%						
MassHealth Plan Rates																
2010		Num	Elig	Den	Rate	LCL	UCL	2008		Num	Elig	Den	Rate	LCL	UCL	
PCCP	(A)	14,332	16,895	16,895	84.8%	84.3%	85.4%	PCCP	(H)	12,685	15,279	15,279	83.0%	82.4%	83.6%	
NHP	(H)	218	13,721	250	87.2%	82.9%	91.5%	NHP	(H)	197	11,745	240	82.1%	77.0%	87.1%	
NH	(H)	197	11,699	229	86.0%	81.3%	90.7%	NH	(H)	239	9,305	288	83.0%	78.5%	87.5%	
FCHP	(H)	210	991	250	84.0%	79.3%	88.7%	FCHP	(A)	209	837	279	74.9%	69.6%	80.2%	
BMCHP	(H)	194	20,537	229	84.7%	79.8%	89.6%	BMCHP	(H)	363	18,830	411	88.3%	85.1%	91.5%	

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

Num indicates Numerator  
 Elig indicates the Eligible Population  
 Den indicates Denominator  
 LCL indicates Lower Confidence Level  
 UCL indicates Upper Confidence Level

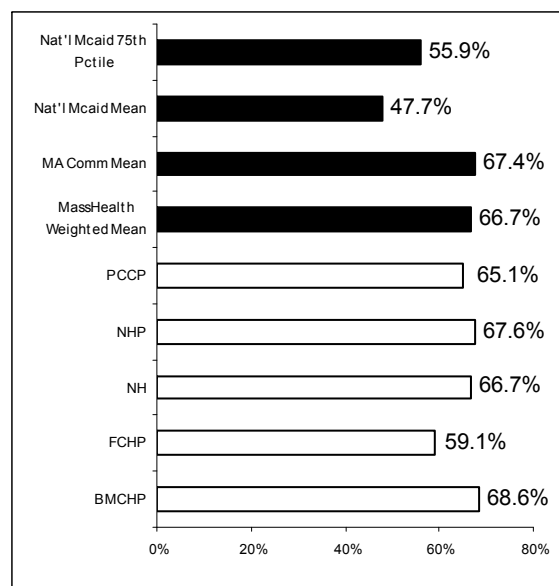
(A) = Measure was collected using administrative method  
 (H) = Measure was collected using hybrid method  
**Note:** The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant with the measure.

## Adolescent Well-Care Visits

The HEDIS Adolescent Well-Care Visits measure assesses whether adolescents had a least one well-care visit with a primary care provider or OB/GYN during 2010, as recommended by clinical guidelines set forth by the American Medical Association (AMA), American Academy of Pediatrics (AAP), and Bright Futures.<sup>12</sup> Annual visits during adolescence allow providers to conduct physical examinations for growth, assess behavior, and deliver anticipatory guidance on issues related to violence, injury prevention and nutrition, as well as to screen for sexual activity, smoking and depression. Adolescents are more likely than younger children to have no well-care visits at all, and this gap is more pronounced for adolescents in publicly-funded managed care.<sup>13,14</sup>

### Adolescent Well-Care Visits

The percentage of members who were 12-21 years of age during 2009 and who had at least one comprehensive well-care visit with a primary care practitioner or OB/GYN during 2009.



#### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile

### Understanding the Results

Sixty-seven percent (66.7%) of MassHealth members who were 12 to 21 years of age had at least one comprehensive well-care visit with a primary care practitioner or OB/GYN during 2009. Rates from each MassHealth plan ranged from 59.1% to 68.6%. All five MassHealth plans (PCCP, NHP, NH, FCHP, and BMCHP) had significantly higher rates than the national Medicaid 75<sup>th</sup> percentile benchmark rate of 55.9%. However, only one plan (PCCP) significantly improved from 2008. In addition, two plans (PCCP and FCHP) had significantly lower rates of adolescent well-care visits compared to the Massachusetts commercial plan mean, so opportunities for improvement remain.

One caveat related to both this measure and the well-child measure is that these measures are calculated using administrative and/or medical record data, rather than survey data. Well-care rates generated from parent surveys and adolescent reported surveys generally yield higher rates of visits compared to the HEDIS well-care measures.<sup>15</sup> For example, the national rate of children meeting AAP guidelines for number of well-care visits is as high as 77% when calculated from parent surveys.<sup>16</sup> However, whether or not administrative and medical record data actually under-report well-care visit rates or survey data over-report the occurrence of well-child visits is unknown. In addition, miscoding of well-child visits for infants and young children and well-care visits for adolescents affect the results of this measure. Research comparing Medicaid administrative data with well-child medical records has documented substantial misclassification of well-child visits as sick visits.<sup>17</sup>



# Adolescent Well-Care Visits

## Statistical Summary

Comparison to Benchmarks:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
PCCP(A)	★	★	●	★
NHP(H)	★	★	○	○
NH(H)	★	★	○	○
FCHP(A)	★	★	●	○
BMCHP(H)	★	★	○	○

### 2010 Comparison Rates

Nat'l Mcaid 90th Pctile:	63.2%	Nat'l Mcaid Mean:	47.7%	MassHealth Weighted Mean:	66.7%
Nat'l Mcaid 75th Pctile:	55.9%	MA Commercial Mean:	67.4%	MassHealth Median:	66.7%

### MassHealth Plan Rates

2010	Num	Elig	Den	Rate	LCL	UCL	2008	Num	Elig	Den	Rate	LCL	UCL
PCCP	(A) 27,104	41,604	41,604	65.1%	64.7%	65.6%	PCCP	(A) 24,394	40,093	40,093	60.8%	60.4%	61.3%
NHP	(H) 271	21,245	401	67.6%	62.9%	72.3%	NHP	(H) 219	20,066	376	58.2%	53.1%	63.4%
NH	(H) 256	14,340	384	66.7%	61.8%	71.5%	NH	(H) 237	13,281	405	58.5%	53.6%	63.4%
FCHP	(A) 993	1,680	1,680	59.1%	56.7%	61.5%	FCHP	(H) 219	1,549	407	53.8%	48.8%	58.8%
BMCHP	(H) 243	27,916	354	68.6%	63.7%	73.6%	BMCHP	(H) 269	27,174	411	65.5%	60.7%	70.2%

#### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

**Num** indicates Numerator  
**Elig** indicates the Eligible Population  
**Den** indicates Denominator  
**LCL** indicates Lower Confidence Level  
**UCL** indicates Upper Confidence Level

(A) = Measure was collected using administrative method  
 (H) = Measure was collected using hybrid method  
**Note:** The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant with the measure.

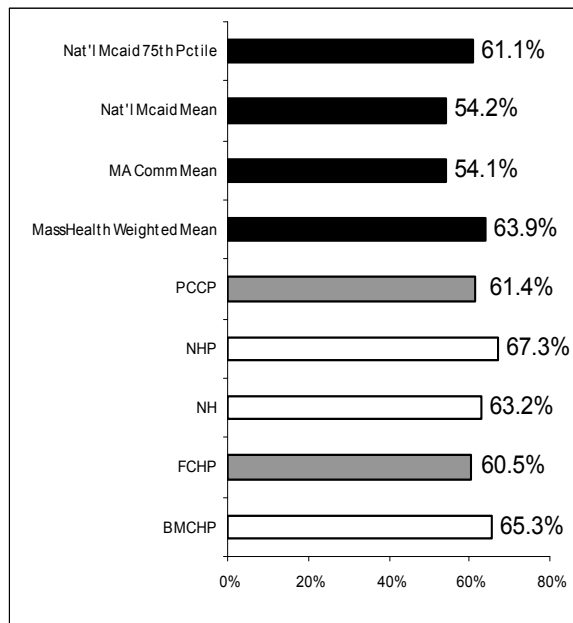
The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2010.

# Chlamydia Screening in Women

The HEDIS Chlamydia Screening in Women measure assesses whether women 15-24 years of age who were identified as sexually active had at least one test for chlamydia during 2009. Chlamydia is the most commonly sexually transmitted bacterial pathogen in the United States.<sup>18</sup> There are estimated to be 3 million new infections each year.<sup>19</sup> Sexually active women 24 years of age or younger are at highest risk for chlamydial infection. Chlamydia can cause urethritis, cervicitis, pelvic inflammatory disease (PID), and can result in ectopic pregnancy, infertility, and chronic pelvic pain.<sup>18</sup> A number of tests are available to identify chlamydia using endocervical or urethral swabs and urine specimens. The U.S. Preventive Services Task Force (USPSTF), American Academy of Family Physicians (AAFP), American College of Obstetricians and Gynecologists (ACOG), and American College of Preventive Medicine (ACPM) all recommend chlamydia screening in women at increased risk for chlamydial infection.<sup>18</sup> Studies show screening can reduce the prevalence of chlamydial infection and PID in women at increased risk.<sup>18</sup>

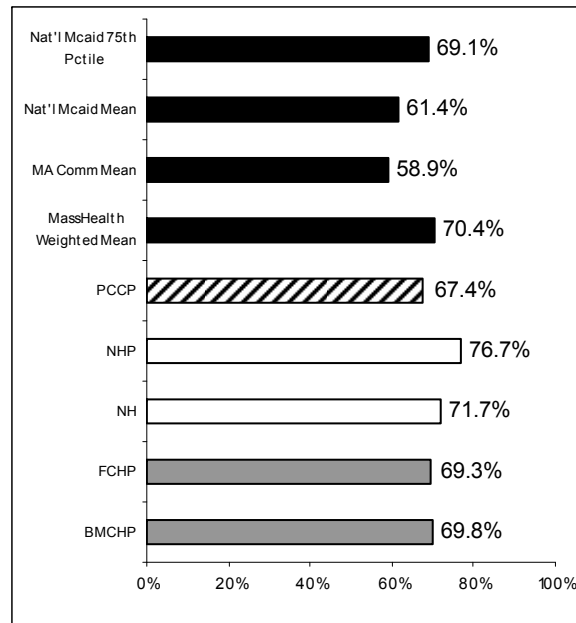
## Age 16 to 20 Years

The percentage of women 16 to 20 years of age who were identified as sexually active and who had at least one chlamydia test during 2009.



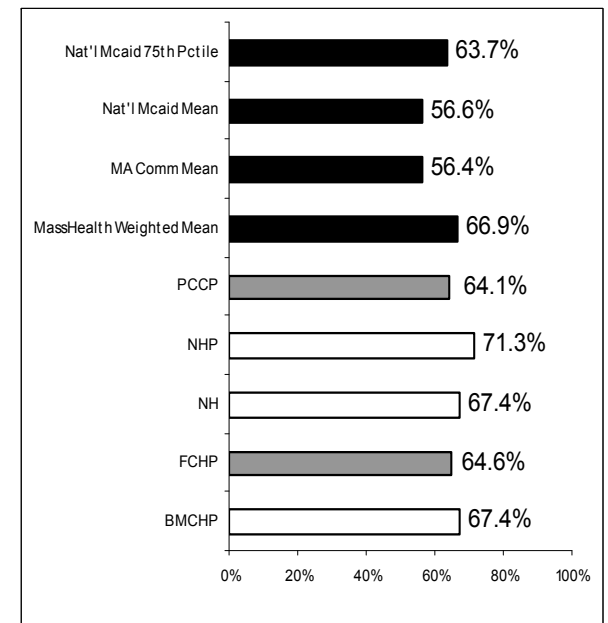
## Age 21 to 24 Years

The percentage of women 21 to 24 years of age who were identified as sexually active and who had at least one chlamydia test during 2009.



## Combined Ages 16 to 24 Years

The percentage of women 16 to 24 years of age who were identified as sexually active and who had at least one chlamydia test during 2009.



### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile

# Chlamydia Screening in Women

## Statistical Summary — Age 16 to 20

Comparison to Benchmarks:					2010 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate	Nat'l Mcaid 90th Pctile:		66.4%		Nat'l Mcaid Mean:		54.2%		MassHealth Weighted Mean:		63.9%			
					Nat'l Mcaid 75th Pctile:		61.1%		MA Commercial Mean:		54.1%		MassHealth Median:		63.2%			
					MassHealth Plan Rates													
PCCP(A)	○	★	★	n/a	2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL	
NHP(A)	★	★	★	n/a	PCCP	(A)	3,771	6,142	61.4%	60.2%	62.6%	PCCP	(A)	n/a	n/a	n/a	n/a	n/a
NH(A)	★	★	★	n/a	NHP	(A)	2,274	3,380	67.3%	65.7%	68.9%	NHP	(A)	n/a	n/a	n/a	n/a	n/a
FCHP(A)	○	★	★	n/a	NH	(A)	1,371	2,169	63.2%	61.2%	65.3%	NH	(A)	n/a	n/a	n/a	n/a	n/a
BMCHP(A)	★	★	★	n/a	FCHP	(A)	161	266	60.5%	54.5%	66.6%	FCHP	(A)	n/a	n/a	n/a	n/a	n/a
					BMCHP	(A)	2,920	4,471	65.3%	63.9%	66.7%	BMCHP	(A)	n/a	n/a	n/a	n/a	n/a

## Statistical Summary — Age 21 to 24

Comparison to Benchmarks:					2010 Comparison Rates														
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate	Nat'l Mcaid 90th Pctile: 73.4%			Nat'l Mcaid Mean: 61.4%			MassHealth Weighted Mean: 70.4%								
					Nat'l Mcaid 75th Pctile: 69.1%			MA Commercial Mean: 58.9%			MassHealth Median: 69.8%								
	MassHealth Plan Rates																		
	2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL						
	PCCP(A)	●	★	★	n/a	PCCP	(A)	3,492	5,182	67.4%	66.1%	68.7%		PCCP	(A)	n/a	n/a	n/a	n/a
NHP(A)	★	★	★	n/a	NHP	(A)	1,931	2,519	76.7%	75.0%	78.3%		NHP	(A)	n/a	n/a	n/a	n/a	n/a
NH(A)	★	★	★	n/a	NH	(A)	1,534	2,139	71.7%	69.8%	73.6%		NH	(A)	n/a	n/a	n/a	n/a	n/a
FCHP(A)	○	★	★	n/a	FCHP	(A)	156	225	69.3%	63.1%	75.6%		FCHP	(A)	n/a	n/a	n/a	n/a	n/a
BMCHP(A)	○	★	★	n/a	BMCHP	(A)	2,805	4,021	69.8%	68.3%	71.2%		BMCHP	(A)	n/a	n/a	n/a	n/a	n/a

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

Num indicates Numerator

Den indicates Denominator

LCL indicates Lower Confidence Level

UCL indicates Upper Confidence Level

(A) = Measure was collected using administrative method

The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2010.

# Chlamydia Screening in Women

## Statistical Summary — Age 16 to 24

Comparison to Benchmarks:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
PCCP(A)	○	★	★	n/a
NHP(A)	★	★	★	n/a
NH(A)	★	★	★	n/a
FCHP(A)	○	★	★	n/a
BMCHP(A)	★	★	★	n/a

**Legend:**

★ 2010 rate is significantly above the comparison rate.

○ 2010 rate is not significantly different from the comparison rate.

● 2010 rate is significantly below the comparison rate.

2010 Comparison Rates													
Nat'l Mcaid 90th Pctile:		68.9%		Nat'l Mcaid Mean:		56.6%		MassHealth Weighted Mean:		66.9%			
Nat'l Mcaid 75th Pctile:		63.7%		MA Commercial Mean:		56.4%		MassHealth Median:		67.4%			
MassHealth Plan Rates													
2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL	
PCCP	(A)	7,263	11,324	64.1%	63.3%	65.0%	PCCP	(A)	n/a	n/a	n/a	n/a	n/a
NHP	(A)	4,205	5,899	71.3%	70.1%	72.4%	NHP	(A)	n/a	n/a	n/a	n/a	n/a
NH	(A)	2,905	4,308	67.4%	66.0%	68.8%	NH	(A)	n/a	n/a	n/a	n/a	n/a
FCHP	(A)	317	491	64.6%	60.2%	68.9%	FCHP	(A)	n/a	n/a	n/a	n/a	n/a
BMCHP	(A)	5,725	8,492	67.4%	66.4%	68.4%	BMCHP	(A)	n/a	n/a	n/a	n/a	n/a

**Num** indicates Numerator

**Den** indicates Denominator

**LCL** indicates Lower Confidence Level

**UCL** indicates Upper Confidence Level

(A) = Measure was collected using administrative method

## Understanding the Results

The chlamydia screening measure is included in this report for the first time this year. Consequently, there are no prior data comparisons to show.

Sixty-four percent (63.9%) of MassHealth female members who were 16 to 20 years of age and were identified as sexually active had at least one chlamydia test during 2009. Three plans (NHP, NH, and BMCHP) had significantly higher rates than the national Medicaid 75<sup>th</sup> percentile benchmark (61.1%), while two plans (PCCP and FCHP) were not significantly different. All five plans (PCCP, NHP, NH, FCHP, and BCMHP) had significantly higher rates compared to the Massachusetts commercial mean.

Compared to members ages 16 to 20 years, seventy percent (70.4%) of members who were age 21 to 24 years and identified as sexually active had at least one chlamydia test during 2009. Reported rates for two plans (NHP and NH) were significantly higher compared to the 2010 national Medicaid 75<sup>th</sup> percentile benchmark (69.1%), while the rate of one plan (PCCP) was significantly lower. In addition, all five plans (PCCP, NHP, NH, FCHP, and BCMHP) had significantly better rates than the Massachusetts commercial mean.

## Chlamydia Screening in Women

### Understanding the Results (continued)

Overall, sixty-seven percent (66.9%) of sexually active female members 16 to 24 years of age had at least one chlamydia test during 2009. Plan specific rates ranged from 64.1% to 71.3%. Reported rates for three plans (NHP, NH, and BMCHP) were significantly better than the national Medicaid benchmark (63.7%), while two plans (PCCP and FCHP) were not significantly different. All five plans (PCCP, NHP, NH, FCHP, and BMCHP) had significantly higher rates of chlamydia screening among female members 16 to 24 years of age compared to the Massachusetts commercial mean.

The HEDIS Chlamydia Screening measure estimates screening rates for each plan using administrative data. Although studies show that using administrative data is an acceptable method for identifying the eligible population (the denominator), overestimation can occur if sexually active members who do not have claims are excluded from the measure.<sup>20,21</sup> Miscoding of services can also affect HEDIS estimates by underestimating the actual screening rate (for example, when chlamydia screening tests are performed but are not captured in claims data).<sup>20,21</sup>

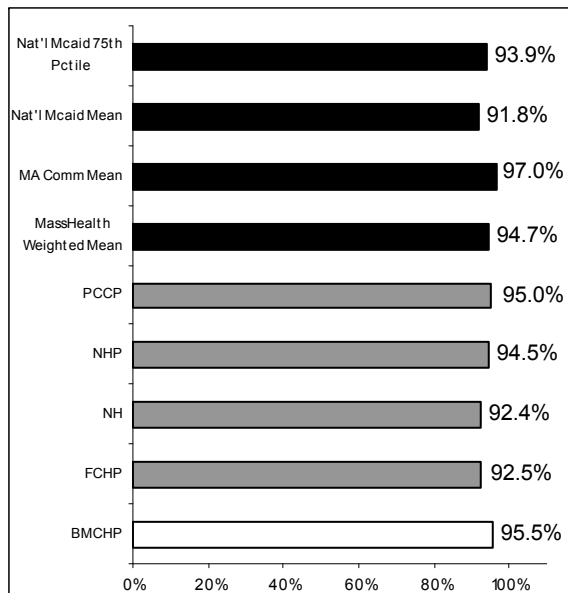
# Living With Illness

# Use of Appropriate Medications for People with Asthma

This measure assesses whether members with persistent asthma were appropriately prescribed medications deemed as preferred therapy for long-term asthma control. The National Heart, Lung, and Blood Institute's (NHLBI) *Guidelines for the Diagnosis and Management of Asthma*, recommend daily long-term control therapy for patients experiencing persistent asthma symptoms.<sup>22</sup> Medications that decrease airway inflammation, such as inhaled corticosteroids (ICS), are considered to be the most effective for controlling asthma.<sup>23,24</sup> These medications reduce the severity of symptoms<sup>25</sup> and prevent exacerbations<sup>26</sup> that can increase the risk of emergency department (ED) visits, hospitalizations, and death from asthma.<sup>27</sup> Despite the effectiveness of ICS, their association with some degree of unwanted side effects may lead to reduced treatment compliance.<sup>28</sup> Studies of Medicaid populations have reported underutilization of asthma control medications<sup>29,30,31</sup> and lower prescription rates compared to privately insured patients.<sup>32</sup>

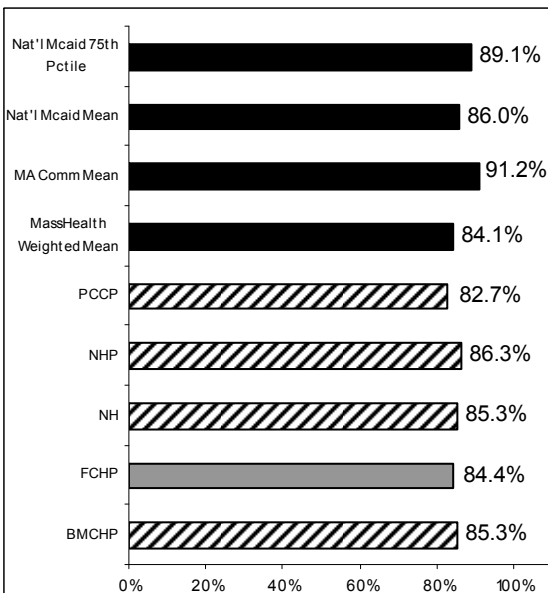
## Age 5 to 11 Years

The percentage of members 5 to 11 years of age who were identified as having persistent asthma and who were appropriately prescribed medication during 2009.



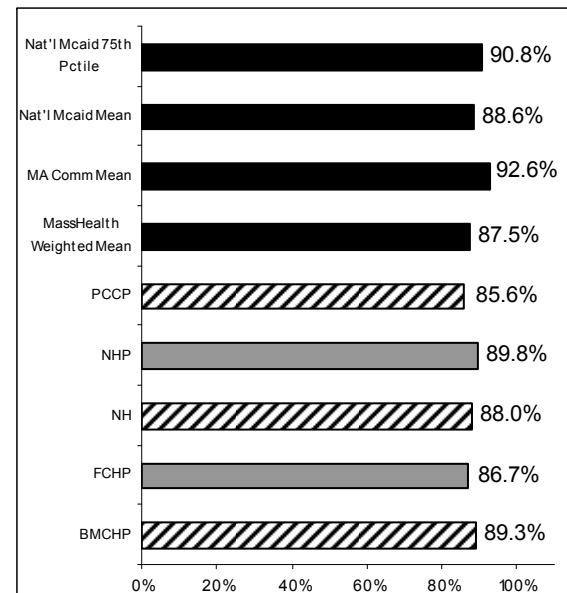
## Age 12 to 50 Years

The percentage of members 12 to 50 years of age who were identified as having persistent asthma and who were appropriately prescribed medication during 2009.



## Combined Ages 5 to 50 Years

The percentage of members 5 to 50 years of age who were identified as having persistent asthma and who were appropriately prescribed medication during 2009.



### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile



# Use of Appropriate Medications for People with Asthma

## Statistical Summary — Age 5 to 11 Years

Comparison to Benchmarks:					2010 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate	Nat'l Mcaid 90th Pctile: 95.5%			Nat'l Mcaid Mean: 91.8%			MassHealth Weighted Mean: 94.7%							
					Nat'l Mcaid 75th Pctile: 93.9%			MA Commercial Mean: 97.0%			MassHealth Median: 94.5%							
	MassHealth Plan Rates																	
	2010	Num		Den	Rate	LCL	UCL		2008	Num		Den	Rate	LCL	UCL			
	PCCP(A)	○	★	●	n/a	PCCP	(A)	1,435	1,511	95.0%	93.8%	96.1%	PCCP	(A)	n/a	n/a	n/a	n/a
NHP(A)	○	★	●	n/a	NHP	(A)	861	911	94.5%	93.0%	96.0%	NHP	(A)	n/a	n/a	n/a	n/a	n/a
NH(A)	○	○	●	n/a	NH	(A)	597	646	92.4%	90.3%	94.5%	NH	(A)	n/a	n/a	n/a	n/a	n/a
FCHP(A)	○	○	○	n/a	FCHP	(A)	49	53	92.5%	84.4%	100.0%	FCHP	(A)	n/a	n/a	n/a	n/a	n/a
BMCHP(A)	★	★	●	n/a	BMCHP	(A)	1,329	1,391	95.5%	94.4%	96.7%	BMCHP	(A)	n/a	n/a	n/a	n/a	n/a

## Statistical Summary — Age 12 to 50 Years

Comparison to Benchmarks:				
PCCP(A)  NHP(A)  NH(A)  FCHP(A)  BMCHP(A)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
	●	●	●	n/a
	●	○	●	n/a
	●	○	●	n/a
	○	○	●	n/a
	●	○	●	n/a

2010 Comparison Rates																
Nat'l Mcaid 90th Pctile:			90.7%		Nat'l Mcaid Mean:			86.0%		MassHealth Weighted Mean:			84.1%			
Nat'l Mcaid 75th Pctile:			89.1%		MA Commercial Mean:			91.2%		MassHealth Median:			85.3%			
MassHealth Plan Rates																
2010		Num	Den	Rate	LCL	UCL		2008		Num	Den	Rate	LCL	UCL		
PCCP	(A)	4,064	4,912	82.7%	81.7%	83.8%		PCCP	(A)	n/a	n/a	n/a	n/a	n/a		
NHP	(A)	1,075	1,245	86.3%	84.4%	88.3%		NHP	(A)	n/a	n/a	n/a	n/a	n/a		
NH	(A)	869	1,019	85.3%	83.1%	87.5%		NH	(A)	n/a	n/a	n/a	n/a	n/a		
FCHP	(A)	114	135	84.4%	78.0%	90.9%		FCHP	(A)	n/a	n/a	n/a	n/a	n/a		
BMCHP	(A)	1,839	2,156	85.3%	83.8%	86.8%		BMCHP	(A)	n/a	n/a	n/a	n/a	n/a		

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

Num indicates Numerator

Den indicates Denominator

LCL indicates Lower Confidence Level

UCL indicates Upper Confidence Level

(A) = Measure was collected using administrative method

# Use of Appropriate Medications for People with Asthma

## Statistical Summary — Combined Age 5 to 50 Years

Comparison to Benchmarks:					2010 Comparison Rates															
					Nat'l Mcaid 90th Pctile:		92.8%		Nat'l Mcaid Mean:		88.6%		MassHealth Weighted Mean:		87.5%					
					Nat'l Mcaid 75th Pctile:		90.8%		MA Commercial Mean:		92.6%		MassHealth Median:		88.0%					
	MassHealth Plan Rates																			
	2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL							
	PCCP(A)	●	●	●	n/a	PCCP	(A)	5,499	6,423	85.6%	84.7%	86.5%	PCCP	(A)	n/a	n/a	n/a	n/a	n/a	
NHP(A)	○	○	●	n/a	NHP	(A)	1,936	2,156	89.8%	88.5%	91.1%	NHP	(A)	n/a	n/a	n/a	n/a	n/a		
NH(A)	●	○	●	n/a	NH	(A)	1,466	1,665	88.0%	86.5%	89.6%	NH	(A)	n/a	n/a	n/a	n/a	n/a		
FCHP(A)	○	○	●	n/a	FCHP	(A)	163	188	86.7%	81.6%	91.8%	FCHP	(A)	n/a	n/a	n/a	n/a	n/a		
BMCHP(A)	●	○	●	n/a	BMCHP	(A)	3,168	3,547	89.3%	88.3%	90.3%	BMCHP	(A)	n/a	n/a	n/a	n/a	n/a		

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

**Num** indicates Numerator  
**Elig** indicates the Eligible Population  
**Den** indicates Denominator  
**LCL** indicates Lower Confidence Level  
**UCL** indicates Upper Confidence Level

(A) = Measure was collected using administrative method

## Understanding the Results

NCQA has made several changes to this measure. These changes include lowering the upper age limit from 56 to 50 years of age and modifying the age stratifications to 5 to 11 years, 12 to 50 years, and Total. Other changes include the deletion of several procedural codes for identifying visit type and the addition of exclusions for cystic fibrosis and acute respiratory failure. Because of the age stratification changes, comparisons of 2010 HEDIS results to HEDIS 2008 data are inappropriate. (The age groupings for HEDIS 2008 were 5 to 9 years, 10 to 17 years, 18 to 56 years, and Total.)

Eighty-eight percent (87.5%) of MassHealth members ages 5 to 50 years with persistent asthma were appropriately prescribed asthma control medication during 2009. Three MassHealth plans (PCCP, NH, and BMCHP) had significantly lower rates than the national Medicaid 75<sup>th</sup> percentile benchmark (90.8%), while two plans (NHP and FCHP) were not significantly different. In addition, all five plans (PCCP, NHP, NH, FCHP, and BMCHP) had significantly lower rates compared to the Massachusetts commercial mean.

The percentage of MassHealth children (age 5-11 years) with persistent asthma who were appropriately prescribed medication was ninety-five percent (94.7%). One MassHealth plan (BMCHP) had a significantly better rate than the 2010 national Medicaid 75th percentile benchmark (93.9%). However, for members ages 12 to 50 years, rates for four of the five plans (PCCP, NHP, NH, and BMCHP) were significantly lower than the benchmark rate of 89.1%. Overall, 84.1% of MassHealth members in the 12-50 age group were prescribed the appropriate medications.

## Use of Appropriate Medications for People with Asthma

### Understanding the Results (continued)

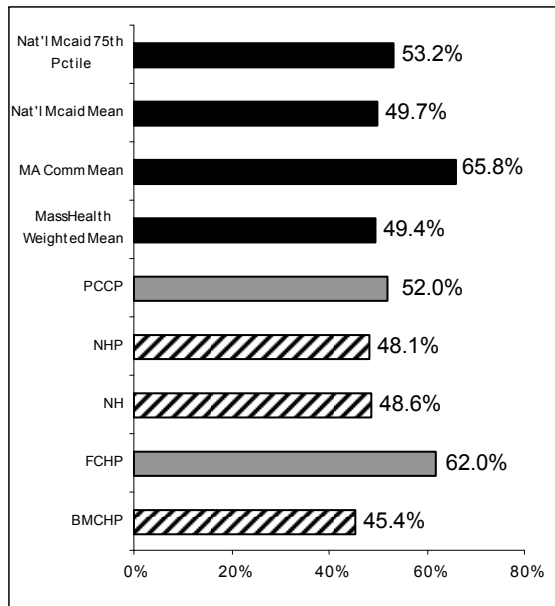
Healthy People 2010 set a number of objectives related to asthma that are directly (e.g., increased rates of appropriate asthma care) and indirectly (e.g., reductions in deaths, hospitalizations, ED visits, activity restrictions, and missed school/work) associated with improved performance on the asthma HEDIS measure.<sup>33</sup> Appropriate asthma care emphasizes patient education and treatment with medication regimens that reduce excessive use of short-acting beta agonists for symptom relief. Use of the asthma medications assessed through the HEDIS measure (e.g., inhaled corticosteroids) can reduce the need for short-acting beta agonists and is associated with reduced risk of subsequent ED visits and hospitalizations among patients with persistent asthma.<sup>34</sup>

# Antidepressant Medication Management

The HEDIS Antidepressant Medication Management (AMM) measure assesses the level of clinical and pharmacological management of depression for newly diagnosed MassHealth members 18 years of age and older. Antidepressants and psychosocial therapy are an effective combination for treating major depression.<sup>35</sup> However, discontinuation of prescribed antidepressants during the acute and continuous phase of treatment can increase the risk of relapse, the persistence of depressive symptoms, and new episodes of depression.<sup>36</sup> Recent studies using the HEDIS AMM measure have reported decreases in antidepressant adherence rates over the course of treatment; by the end of the continuation phase less than half of patients remain on prescribed medication.<sup>37,38</sup>

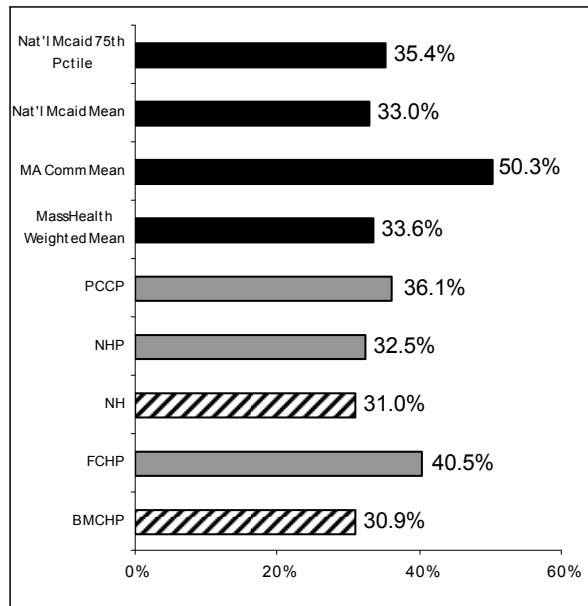
## Effective Acute Phase

The percentage of members 18 years of age and older who were diagnosed with a new episode of depression, were treated with antidepressant medication and remained on an antidepressant drug during the entire 84-day Acute Treatment Phase.



## Effective Continuation Phase

The percentage of members 18 years of age and older who were diagnosed with a new episode of depression and treated with antidepressant medication and who remained on an antidepressant drug for at least 180 days.



## Understanding the Results

For HEDIS 2010, NCQA deleted several procedural codes for identifying the eligible population for this measure. This change should be considered when comparing results to prior rates.

Forty-nine percent (49.4%) of MassHealth members age 18 years and older who were diagnosed with a new episode of depression and were treated with antidepressant medication remained on an antidepressant drug during the entire 84-day Acute Treatment Phase. Rates from each MassHealth plan ranged from 45.4% to 62.0%. Three plans (NHP, NH, and BMCHP) had rates that were significantly lower than the national Medicaid 75<sup>th</sup> percentile benchmark (53.2%), while two plans (PCCP and FCHP) were not significantly different. Although one plan (BMCHP) significantly improved from 2008, there were no significant changes for four of the five plans (PCCP, NHP, NH, and FCHP).

Thirty-four percent (33.6%) of members age 18 years and older who were diagnosed with a new episode of depression and treated with antidepressant medication remained on an antidepressant drug for at least 180 days. Plan rates ranged from 30.9% to 40.5%. One plan rate (BMCHP) significantly improved from 2008, while the rates for the remaining four plans did not show a significant change. In addition, two plans (NH and BMCHP) had rates that were significantly below the national Medicaid 75<sup>th</sup> percentile benchmark (35.4%).

### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile

# Antidepressant Medication Management

## Statistical Summary — Effective Acute Phase

Comparison to Benchmarks:					2010 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate	Nat'l Mcaid 90th Pctile: 58.4%			Nat'l Mcaid Mean: 49.7%			MassHealth Weighted Mean: 49.4%							
					Nat'l Mcaid 75th Pctile: 53.2%			MA Commercial Mean: 65.8%			MassHealth Median: 48.6%							
					MassHealth Plan Rates													
2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL						
PCCP(A)	○	★	●	○	PCCP	(A)	1,215	2,336	52.0%	50.0%	54.1%	PCCP	(A)	944	1,937	48.7%	46.5%	51.0%
NHP(A)	●	○	●	○	NHP	(A)	410	852	48.1%	44.7%	51.5%	NHP	(A)	260	576	45.1%	41.0%	49.3%
NH(A)	●	○	●	○	NH	(A)	329	677	48.6%	44.8%	52.4%	NH	(A)	257	548	46.9%	42.6%	51.2%
FCHP(A)	○	★	○	○	FCHP	(A)	49	79	62.0%	50.7%	73.4%	FCHP	(A)	39	79	49.4%	37.7%	61.0%
BMCHP(A)	●	●	●	★	BMCHP	(A)	611	1,345	45.4%	42.7%	48.1%	BMCHP	(A)	391	1,121	34.9%	32.0%	37.7%

## Statistical Summary — Effective Continuation Phase

Comparison to Benchmarks:				
PCCP(A)  NHP(A)  NH(A)  FCHP(A)  BMCHP(A)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
	○	★	●	○
	○	○	●	○
	●	○	●	○
	○	○	○	○
●	○	●	★	

2010 Comparison Rates														
Nat'l Mcaid 90th Pctile:			43.3%		Nat'l Mcaid Mean:			33.0%		MassHealth Weighted Mean:			33.6%	
Nat'l Mcaid 75th Pctile:			35.4%		MA Commercial Mean:			50.3%		MassHealth Median:			32.5%	
MassHealth Plan Rates														
2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL		
PCCP	(A) 843	2,336	36.1%	34.1%	38.1%		PCCP	(A) 641	1,937	33.1%	31.0%	35.2%		
NHP	(A) 277	852	32.5%	29.3%	35.7%		NHP	(A) 162	576	28.1%	24.4%	31.9%		
NH	(A) 210	677	31.0%	27.5%	34.6%		NH	(A) 179	548	32.7%	28.6%	36.7%		
FCHP	(A) 32	79	40.5%	29.0%	52.0%		FCHP	(A) 28	79	35.4%	24.3%	46.6%		
BMCHP	(A) 416	1,345	30.9%	28.4%	33.4%		BMCHP	(A) 221	1,121	19.7%	17.3%	22.1%		

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

**Num** indicates Numerator  
**Elig** indicates the Eligible Population  
**Den** indicates Denominator  
**LCL** indicates Lower Confidence Level  
**UCL** indicates Upper Confidence Level

(A) = Measure was collected using administrative method

# Antidepressant Medication Management

## Understanding the Results (continued)

Non-adherence with antidepressant regimens during the first 30 days of treatment is more likely to occur among patients with certain socio-demographic characteristics including: younger age, fewer than 12 years of education, and lower income status.<sup>39,40,41,42</sup> Other factors associated with higher rates of non-adherence include: comorbid substance abuse or cardiovascular/metabolic conditions,<sup>43</sup> lower severity of perceived mental health symptoms<sup>44,45</sup> and antidepressant side-effects such as weight gain, anxiety,<sup>46</sup> and sexual dysfunction.<sup>47</sup>

Having access to mental health specialty care along with antidepressants is strongly associated with higher rates of acute and continuous phase adherence.<sup>48</sup> Patients are significantly more likely to continue taking their medication past 30 days if they receive care from a psychiatrist versus another specialist or general practitioner.<sup>49,50</sup> In addition, treatment with newer medications, such as selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs), at higher than target doses has been associated with increased rates of longer term adherence compared to other antidepressants.<sup>51,52</sup> A recent study found that psychiatrists are more likely to prescribe SSRIs at levels that approximate the maximum recommended dose than general medical providers.<sup>53</sup>

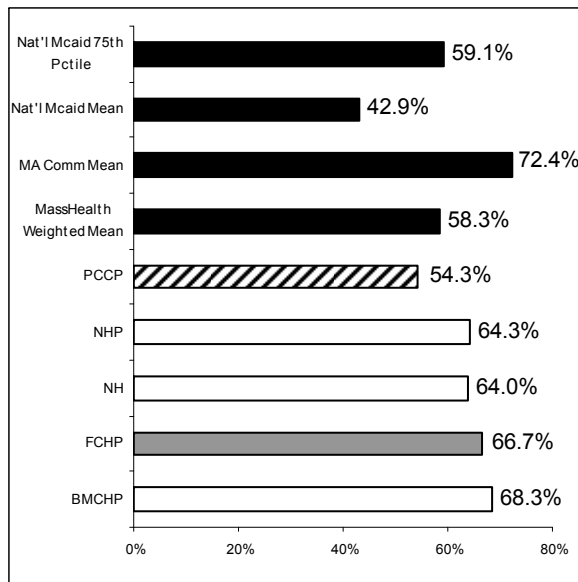
Increasing patient access to psychiatric care directly or through collaborative care models may improve rates of adherence to antidepressants. A psychiatric telemedicine program for primary care clinics that lacked on-site psychiatrists was shown to improve adherence rates in rural communities with limited access to specialized mental health services.<sup>54</sup> In addition, improving provider-patient communication about treatment with antidepressants can also have a positive influence on adherence rates. Three key provider messages shown to have significantly increased the odds of adherence involve talking to patients about the length of time they should expect to take the medication, what to do if they have questions, and the importance of continuing to take the medication even if they are feeling better.<sup>55</sup>

## Follow-up After Hospitalization for Mental Illness

This measure assesses the rate of follow-up care 7 and 30 days after hospitalization for the treatment of mental illness. Timely follow-up services for patients discharged from psychiatric hospitalization can reduce the risk of readmission.<sup>56,57</sup> Predictors of timely follow-up care include members' sociodemographic, clinical, and service utilization characteristics. For example, patients in mental health treatment before hospitalization have been shown to be more likely to have timely follow-up care than those who have not been in treatment.<sup>57</sup> In another study, patients were found to be more likely to attend initial follow-up appointments when scheduled within two weeks of their discharge.<sup>58</sup>

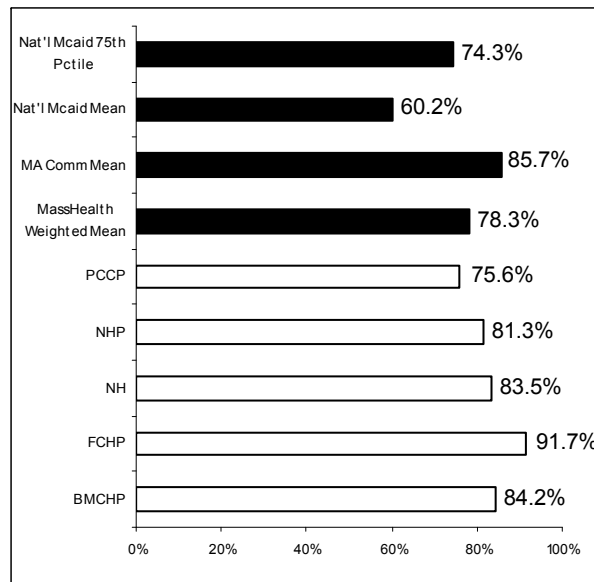
### 7 Day

The percentage of members 6 years of age and older who were discharged after treatment of selected mental health disorders and who were seen on an ambulatory basis or were in intermediate treatment with a mental health provider within 7 days after discharge.



### 30 Day

The percentage of members 6 years of age and older who were discharged after treatment of selected mental health disorders and who were seen on an ambulatory basis or were in intermediate treatment with a mental health provider within 30 days after discharge.



### Understanding the Results

A number of procedural codes to identify mental health outpatient visits were removed. This change should be considered when comparing results with prior rates.

Fifty-eight percent (58.3%) of MassHealth members age 6 years and older who were hospitalized for treatment of mental illness had a follow-up visit (i.e., outpatient (OP), intensive OP encounter, or partial hospitalization) within seven days of discharge. Seven-day follow-up rates for individual plans ranged from 54.3% to 68.3%. The rate for one plan (BMCHP) significantly improved from 2008, while rates for four plans remained statistically unchanged. Compared to the national Medicaid 75<sup>th</sup> percentile benchmark (59.1%), three plans (NHP, NH, and BMCHP) had significantly higher rates, one plan (PCCP) had a significantly lower rate, and one plan (FCHP) had a rate that was not statistically different.

Seventy-eight percent (78.3%) of members age 6 years and older who were hospitalized for treatment of mental illness had a follow-up visit within 30 days. Thirty-day follow-up rates from individual plans ranged from 75.6% to 91.7%. All five MassHealth plans (PCCP, NHP, NH, FCHP, and BMCHP) had rates that were significantly above the national Medicaid 75<sup>th</sup> percentile benchmark (74.3%).

#### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile



# Follow-up After Hospitalization for Mental Illness

## Statistical Summary — 7 Day

Comparison to Benchmarks:					2010 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate	Nat'l Mcaid 90th Pctile:		64.3%		Nat'l Mcaid Mean:		42.9%		MassHealth Weighted Mean:		58.3%			
					Nat'l Mcaid 75th Pctile:		59.1%		MA Commercial Mean:		72.4%		MassHealth Median:		64.3%			
					MassHealth Plan Rates													
2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL						
PCCP(A)	●	★	●	○	PCCP	(A)	3,428	6,308	54.3%	53.1%	55.6%	PCCP	(A)	3,016	5,480	55.0%	53.7%	56.4%
NHP(A)	★	★	●	○	NHP	(A)	656	1,021	64.3%	61.3%	67.2%	NHP	(A)	467	748	62.4%	58.9%	66.0%
NH(A)	★	★	●	○	NH	(A)	486	759	64.0%	60.6%	67.5%	NH	(A)	346	598	57.9%	53.8%	61.9%
FCHP(A)	○	★	○	○	FCHP	(A)	72	108	66.7%	57.3%	76.0%	FCHP	(A)	80	114	70.2%	61.3%	79.0%
BMCHP(A)	★	★	●	★	BMCHP	(A)	950	1,390	68.3%	65.9%	70.8%	BMCHP	(A)	755	1,402	53.9%	51.2%	56.5%

## Statistical Summary — 30 Day

Comparison to Benchmarks:					2010 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate	Nat'l Mcaid 90th Pctile: 83.6% Nat'l Mcaid Mean: 60.2% MassHealth Weighted Mean: 78.3%													
					Nat'l Mcaid 75th Pctile: 74.3% MA Commercial Mean: 85.7% MassHealth Median: 83.5%													
	MassHealth Plan Rates																	
	2010	Num	Den	Rate	LCL	UCL		2008	Num	Den	Rate	LCL	UCL					
	PCCP	(A) 4,769	6,308	75.6%	74.5%	76.7%		PCCP	(A) 4,175	5,631	74.1%	73.0%	75.3%					
NHP	(A) 830	1,021	81.3%	78.9%	83.7%	NHP		(A) 443	482	91.9%	89.4%	94.4%						
NH	(A) 634	759	83.5%	80.8%	86.2%	NH		(A) 442	574	77.0%	73.5%	80.5%						
FCHP	(A) 99	108	91.7%	86.0%	97.3%	FCHP		(A) 67	84	79.8%	70.6%	88.9%						
BMCHP	(A) 1,170	1,390	84.2%	82.2%	86.1%	BMCHP	(A) 1,102	1,405	78.4%	76.2%	80.6%							

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

**Num** indicates Numerator  
**Elig** indicates the Eligible Population  
**Den** indicates Denominator  
**LCL** indicates Lower Confidence Level  
**UCL** indicates Upper Confidence Level

(A) = Measure was collected using administrative method

The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2010.

## Follow-up After Hospitalization for Mental Illness

### Understanding the Results (continued)

However, only one plan (BMCHP) significantly improved from 2008, while the rates of the other four plans remained statistically unchanged.

Other significant predictors of missed follow-up appointments may include: lack of prior psychiatric treatment and continuation of care following discharge; involuntary admission to the hospital; discharge against medical advice; and the presence of psychosocial stressors.<sup>58-60</sup> In a recent study, adult Medicaid-enrollees from a large mid-Atlantic state who received clinical services for mental health in the month leading up to hospital admission were more than three times likely to adhere to scheduled follow-up care within 7 or 30 days after discharge than individuals who did not.<sup>61</sup>

Plans serving MassHealth members with mental illness might improve their follow-up rates by pursuing interventions targeting individuals with one or more of the above risk factors for poor attendance at outpatient visits. For example, hospital discharge planning designed to consider patient preferences for outpatient treatment, promote early and ongoing communication between clinician and patients, and set appropriate expectations for the type and timing of follow-up care could foster compliance with scheduled appointments.<sup>62,63</sup> Designating staff to coordinate patient care after hospital discharge has been shown to

increase rates of compliance with follow-up care.<sup>64</sup>

For patients lacking primary social support, plans could initiate interventions that help strengthen existing family supports or create linkages to consumer supports in the community. One model, the Peer Bridger Project of the New York Association of Psychiatric Rehabilitation Services, connects individuals who have a history of psychiatric hospitalization with admitted patients, with the aim of helping them identify positive community support groups following their discharge.<sup>65</sup>

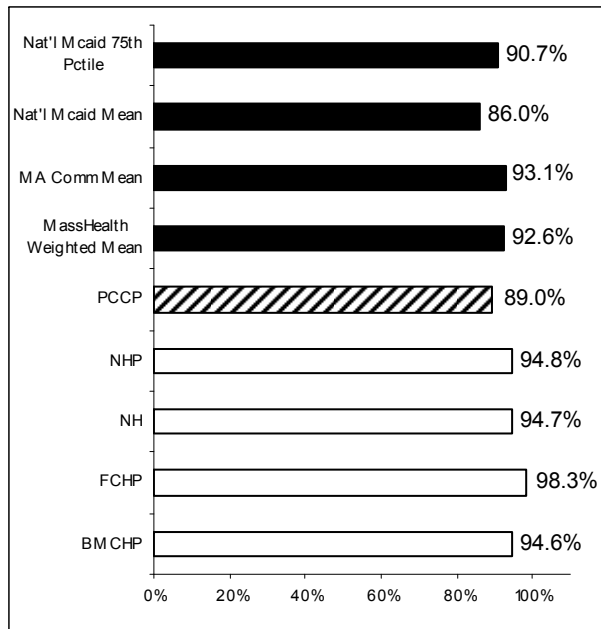
# Getting Better

# Appropriate Treatment for Children with Upper Respiratory Infection

This measure assesses whether children 3 months to 18 years of age who were given a diagnosis of upper respiratory infection (URI) were not dispensed an antibiotic prescription. Current experts recommend against prescribing antibiotics for URIs which are commonly caused by viruses, not bacteria. Adherence to these recommendations is important to the control of the emergence and spread of antibiotic-resistant bacteria. This is due in part to the inappropriate use of antibiotics for conditions which do not warrant antibiotic treatment. Despite this, approximately 75 percent of all outpatient prescriptions are given to children with URIs.<sup>66</sup>

## Appropriate Treatment for URI

The percentage of members 3 months to 18 years of age who were given a diagnosis of URI and were not dispensed an antibiotic prescription on or three days after the outpatient visit where the URI diagnosis was made. Higher rates indicate more appropriate use of antibiotics.



### KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2010)
- Rate is *significantly above* the 2010 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2010 national Medicaid 75th percentile
- Rate is *significantly below* the 2010 national Medicaid 75th percentile

## Understanding the Results

NCQA added competing diagnosis criteria for acne to this measure. This change should be considered when comparing HEDIS 2010 results with prior rates.

Ninety-three percent (92.6%) of MassHealth members 3 months to 18 years of age who had a URI were not prescribed an antibiotic within the first three days after diagnosis. Rates from individual plans ranged from 89.0% to 98.3%. One plan (PCCP) had a rate that was significantly lower than the national Medicaid 75<sup>th</sup> percentile benchmark (90.7%), while the remaining four plans (NHP, NH, FCHP, BMCHP) had significantly higher rates. In addition, the rates for two plans (PCCP and NH) significantly improved from 2008, while three plans (NHP, FCHP, BMCHP) did not significantly change.

A number of factors influence the inappropriate prescription of antibiotics for children with URI. These factors include physician's perception of parental expectations for an antibiotic prescription in response to an illness episode, if the child is of school age, the existence of a chronic illness such as asthma, whether the physician is a pediatrician, and the number of years the provider has been in practice.<sup>67-69</sup> Activities that can help decrease rates of inappropriate antibiotic use for URIs include provider education about current clinical guidelines as well as availability and distribution of educational materials in examination rooms.<sup>70</sup>

# Appropriate Treatment for Children with URI

## Statistical Summary

Comparison to Benchmarks:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2008 Rate
PCCP(A)	●	★	●	★
NHP(A)	★	★	★	○
NH(A)	★	★	★	★
FCHP(A)	★	★	★	○
BMCHP(A)	★	★	★	○

2010 Comparison Rates														
Nat'l Mcaid 90th Pctile:		94.9%		Nat'l Mcaid Mean:		86.0%		MassHealth Weighted Mean:		92.6%				
Nat'l Mcaid 75th Pctile:		90.7%		MA Commercial Mean:		93.1%		MassHealth Median:		94.7%				
MassHealth Plan Rates														
2010		Num	Den	Rate *	LCL	UCL		2008		Num	Den	Rate *	LCL	UCL
PCCP	(A)	1,603	14,593	89.0%	88.5%	89.5%		PCCP	(A)	1,890	13,778	86.3%	85.7%	86.9%
NHP	(A)	386	7,494	94.8%	94.3%	95.4%		NHP	(A)	328	6,356	94.8%	94.3%	95.4%
NH	(A)	266	5,030	94.7%	94.1%	95.3%		NH	(A)	380	4,104	90.7%	89.8%	91.6%
FCHP	(A)	9	528	98.3%	97.1%	99.5%		FCHP	(A)	19	515	96.3%	94.6%	98.0%
BMCHP	(A)	577	10,645	94.6%	94.1%	95.0%		BMCHP	(A)	591	9,500	93.8%	93.3%	94.3%

\* Reported percentages are inverted rates (i.e., 1-(numerator/denominator)).

### Legend:

- ★ 2010 rate is significantly above the comparison rate.
- 2010 rate is not significantly different from the comparison rate.
- 2010 rate is significantly below the comparison rate.

Num indicates Numerator  
 Elig indicates the Eligible Population  
 Den indicates Denominator  
 LCL indicates Lower Confidence Level  
 UCL indicates Upper Confidence Level

(A) = Measure was collected using administrative method

# Use of Services

## Mental Health Utilization

The HEDIS 2010 Mental Health Utilization measure assesses utilization of mental health services (e.g., inpatient, intensive outpatient, partial hospitalization, outpatient, and emergency department) by MassHealth members during 2009. These data provide insights into the volume of mental health services utilized but do not address their quality (i.e., the appropriateness or effectiveness of care) or the potential for over- or under-utilization of services, particularly across various mental health conditions, such as depression or schizophrenia. The relationship between the volume and quality of mental health services has not been thoroughly studied. One study, however, concluded that health plans with low utilization for outpatient and inpatient mental health services are more likely to demonstrate poor results on other HEDIS behavior health measures, e.g., rates of 7-day and 30-day follow-up after hospitalization for mental illness, and rates of provider contact and acute and continuation phase treatment with antidepressant medication.<sup>71</sup> (Data for these measures are presented on pages 32-38).

### Percentage of Members Using Services

The number and percentage of members who received mental health services during 2009. Mental health services are broken down by inpatient, intermediate, ambulatory, and any service. (The Intermediate category refers to intensive outpatient services and partial hospitalization programs.) The denominator used to calculate the percentages is member years (i.e., member months divided by 12). Data stratified by gender and age (0-12, 13-17, 18-64, and 65+) appear in Appendix H.

According to the 2008 National Survey on Drug Use and Health (NSDUH), rates of mental health services utilization by U.S. adults have remained relatively constant compared to the 2007 survey results: 13.4% (vs. 13.25% in 2007) received mental health services during the 12-months prior to the survey; 0.9% (vs. 1.0% in 2007) received inpatient treatment and 6.8% (vs. 6.9% in 2007) received outpatient treatment during the same time period.<sup>72</sup>

For HEDIS 2010, NCQA modified the criteria for identifying utilization of mental health services (including inpatient, intensive outpatient or partial hospitalization, and outpatient or emergency services).

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	3,567,282	8,148	2.7%	12,563	4.2%	89,151	30.0%	90,505	30.4%
<b>NHP</b>	1,588,376	1,171	0.9%	1,782	1.3%	21,952	16.6%	22,291	16.8%
<b>NH</b>	1,265,777	1,006	1.0%	348	0.3%	18,583	17.6%	18,709	17.7%
<b>FCHP</b>	142,411	98	0.8%	30	0.3%	2,101	17.7%	2,111	17.8%
<b>BMCHP</b>	2,135,430	2,044	1.1%	884	0.5%	38,248	21.5%	38,375	21.6%
<b>2010 National Medicaid 75th Percentile</b>			1.0%		0.5%		11.75%		11.83%

The source of the National Medicaid 75th Percentile is Quality Compass, 2010.



# Appendix A:

## MassHealth Regions and Service Areas

## MassHealth Service Areas and Regions

<u>Region</u>	<u>Service Areas*</u>
Western	Adams, Greenfield, Holyoke, Northampton, Pittsfield, Springfield, and Westfield
Central	Athol, Framingham, Gardner-Fitchburg, Southbridge, Waltham, and Worcester
Northern	Beverly, Gloucester, Haverhill, Lawrence, Lowell, Lynn, Malden, Salem, and Woburn
Boston-Greater Boston	Boston, Revere, Somerville, and Quincy
Southern	Attleboro, Barnstable, Brockton, Fall River, Falmouth, Nantucket, New Bedford, Oak Bluffs, Orleans, Plymouth, Taunton, Wareham

\* each service area includes multiple cities and towns.

# Appendix B:

## Childhood immunization Combinations 4 through 10 (Plan Rates Only)

# Childhood Immunization Combinations 4 through 10

**Combo 4**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	137	4,029	411	33.3%	28.7%	38.0%
NHP	(H)	155	4,360	411	37.7%	32.9%	42.5%
NH	(H)	143	3,978	411	34.8%	30.1%	39.5%
FCHP	(H)	193	294	293	65.9%	60.3%	71.5%
BMCHP	(H)	163	6,035	411	39.7%	34.8%	44.5%

**Combo 5**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	191	4,029	411	46.5%	41.5%	51.4%
NHP	(H)	239	4,360	411	58.2%	53.3%	63.0%
NH	(H)	197	3,978	411	47.9%	43.0%	52.9%
FCHP	(H)	192	294	293	65.5%	59.9%	71.1%
BMCHP	(H)	202	6,035	411	49.1%	44.2%	54.1%

**Combo 6**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	192	4,029	411	46.7%	41.8%	51.7%
NHP	(H)	226	4,360	411	55.0%	50.1%	59.9%
NH	(H)	193	3,978	411	47.0%	42.0%	51.9%
FCHP	(H)	180	294	293	61.4%	55.7%	67.2%
BMCHP	(H)	219	6,035	411	53.3%	48.3%	58.2%

**Combo 7**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	99	4,029	411	24.1%	19.8%	28.3%
NHP	(H)	111	4,360	411	27.0%	22.6%	31.4%
NH	(H)	104	3,978	411	25.3%	21.0%	29.6%
FCHP	(H)	157	294	293	53.6%	47.7%	59.5%
BMCHP	(H)	107	6,035	411	26.0%	21.7%	30.4%

**Combo 8**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	98	4,029	411	23.8%	19.6%	28.1%
NHP	(H)	105	4,360	411	25.5%	21.2%	29.9%
NH	(H)	95	3,978	411	23.1%	18.9%	27.3%
FCHP	(H)	147	294	293	50.2%	44.3%	56.1%
BMCHP	(H)	122	6,035	411	29.7%	25.1%	34.2%

**Combo 9**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	134	4,029	411	32.6%	27.9%	37.3%
NHP	(H)	162	4,360	411	39.4%	34.6%	44.3%
NH	(H)	131	3,978	411	31.9%	27.2%	36.5%
FCHP	(H)	147	294	293	50.2%	44.3%	56.1%
BMCHP	(H)	152	6,035	411	37.0%	32.2%	41.8%

**Combo 10**

		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	77	4,029	411	18.7%	14.8%	22.6%
NHP	(H)	77	4,360	411	18.7%	14.8%	22.6%
NH	(H)	75	3,978	411	18.2%	14.4%	22.1%
FCHP	(H)	126	294	293	43.0%	37.2%	48.8%
BMCHP	(H)	84	6,035	411	20.4%	16.4%	24.5%

# Appendix C:

## Antigen-Specific Childhood Immunization Rates

# Antigen-Specific Childhood Immunization Rates

2010 Comparison Rates— 4 DTaP/DT	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	88.5%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	85.2%
Nat'l Medicaid Mean:	79.6%
MA Commercial Mean:	87.9%
MassHealth Weighted Mean:	86.8%
MassHealth Median:	87.1%

DTaP		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	356	4,029	411	86.6%	83.2%	90.0%
NHP	(H)	366	4,360	411	89.1%	85.9%	92.2%
NH	(H)	344	3,978	411	83.7%	80.0%	87.4%
FCHP	(H)	260	294	293	88.7%	84.9%	92.5%
BMCHP	(H)	358	6,035	411	87.1%	83.7%	90.5%

2010 Comparison Rates— 3 IPV	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	95.6%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	93.7%
Nat'l Medicaid Mean:	89.0%
MA Commercial Mean:	91.6%
MassHealth Weighted Mean:	93.0%
MassHealth Median:	94.9%

IPV		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	391	4,029	411	95.1%	92.9%	97.3%
NHP	(H)	396	4,360	411	96.4%	94.4%	98.3%
NH	(H)	362	3,978	411	88.1%	84.8%	91.3%
FCHP	(H)	278	294	293	94.9%	92.2%	97.6%
BMCHP	(H)	380	6,035	411	92.5%	89.8%	95.1%

2010 Comparison Rates—1 MMR	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	95.8%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	93.9%
Nat'l Medicaid Mean:	91.2%
MA Commercial Mean:	90.5%
MassHealth Weighted Mean:	92.6%
MassHealth Median:	93.4%

MMR		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	382	4,029	411	92.9%	90.3%	95.5%
NHP	(H)	391	4,360	411	95.1%	92.9%	97.3%
NH	(H)	362	3,978	411	88.1%	84.8%	91.3%
FCHP	(H)	276	294	293	94.2%	91.4%	97.0%
BMCHP	(H)	384	6,035	411	93.4%	90.9%	95.9%

2010 Comparison Rates—3 HiB	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	97.8%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	96.6%
Nat'l Medicaid Mean:	93.7%
MA Commercial Mean:	93.8%
MassHealth Weighted Mean:	95.5%
MassHealth Median:	96.4%

HiB		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	397	4,029	411	96.6%	94.7%	98.5%
NHP	(H)	403	4,360	411	98.1%	96.6%	99.5%
NH	(H)	371	3,978	411	90.3%	87.3%	93.3%
FCHP	(H)	282	294	293	96.2%	93.9%	98.6%
BMCHP	(H)	396	6,035	411	96.4%	94.4%	98.3%

2010 Comparison Rates—3 HepB	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	96.4%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	94.3%
Nat'l Medicaid Mean:	89.1%
MA Commercial Mean:	90.9%
MassHealth Weighted Mean:	93.6%
MassHealth Median:	93.9%

HepB		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	388	4,029	411	94.4%	92.1%	96.7%
NHP	(H)	402	4,360	411	97.8%	96.3%	99.3%
NH	(H)	363	3,978	411	88.3%	85.1%	91.5%
FCHP	(H)	275	294	293	93.9%	90.9%	96.8%
BMCHP	(H)	384	6,035	411	93.4%	90.9%	95.9%

2010 Comparison Rates—1 VZV	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	95.4%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	93.9%
Nat'l Medicaid Mean:	90.6%
MA Commercial Mean:	91.1%
MassHealth Weighted Mean:	92.3%
MassHealth Median:	90.5%

VZV		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	372	4,029	411	90.5%	87.6%	93.5%
NHP	(H)	392	4,360	411	95.4%	93.2%	97.5%
NH	(H)	361	3,978	411	87.8%	84.6%	91.1%
FCHP	(H)	264	294	293	90.1%	86.5%	93.7%
BMCHP	(H)	388	6,035	411	94.4%	92.1%	96.7%

The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2010.

## Antigen-Specific Childhood Immunization Rates

2010 Comparison Rates—4 PCV							
Nat'l Medicaid 90 <sup>th</sup> Percentile:				87.8%			
Nat'l Medicaid 75 <sup>th</sup> Percentile:				84.1%			
Nat'l Medicaid Mean:				77.7%			
MA Commercial Mean:				87.6%			
MassHealth Weighted Mean:				86.2%			
MassHealth Median:				86.1%			
PCV		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	346	4,029	411	84.2%	80.5%	87.8%
NHP	(H)	373	4,360	411	90.8%	87.8%	93.7%
NH	(H)	342	3,978	411	83.2%	79.5%	86.9%
FCHP	(H)	264	294	293	90.1%	86.5%	93.7%
BMCHP	(H)	354	6,035	411	86.1%	82.7%	89.6%



# Appendix D:

Well-Child Visits in the First 15 Months of Life (Rates for 0, 1, 2, 3, 4 and 5 Visits)

## Well-Child rates (0,1,2,3,4 and 5 Visits)

2010 Comparison Rates—0 visits	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	5.1%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	3.1%
Nat'l Medicaid Mean:	2.3%
MA Commercial Mean:	1.5%
MassHealth Weighted Mean:	0.4%
MassHealth Median:	0.4%

0 visits		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	0	2,681	250	0.0%	0.0%	0.2%
NHP	(H)	1	3,457	260	0.4%	0.0%	1.3%
NH	(H)	1	3,061	376	0.3%	0.0%	0.9%
FCHP	(A)	1	224	224	0.4%	0.0%	1.5%
BMCHP	(H)	2	5,072	270	0.7%	0.0%	1.9%

2010 Comparison Rates—1 visit	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	4.4%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	2.9%
Nat'l Medicaid Mean:	2.1%
MA Commercial Mean:	0.7%
MassHealth Weighted Mean:	0.4%
MassHealth Median:	0.4%

1 visit		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	1	2,681	250	0.4%	0.0%	1.4%
NHP	(H)	2	3,457	260	0.8%	0.0%	2.0%
NH	(H)	3	3,061	376	0.8%	0.0%	1.8%
FCHP	(A)	1	224	224	0.4%	0.0%	1.5%
BMCHP	(H)	0	5,072	270	0.0%	0.0%	0.2%

2010 Comparison Rates—2 visits	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	5.9%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	4.6%
Nat'l Medicaid Mean:	3.4%
MA Commercial Mean:	0.8%
MassHealth Weighted Mean:	0.4%
MassHealth Median:	0.0%

2 visits		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	0	2,681	250	0.0%	0.0%	0.2%
NHP	(H)	1	3,457	260	0.4%	0.0%	1.3%
NH	(H)	5	3,061	376	1.3%	0.0%	2.6%
FCHP	(A)	0	224	224	0.0%	0.0%	0.2%
BMCHP	(H)	0	5,072	270	0.0%	0.0%	0.2%

2010 Comparison Rates—3 visits	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	9.5%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	7.4%
Nat'l Medicaid Mean:	5.7%
MA Commercial Mean:	1.0%
MassHealth Weighted Mean:	1.3%
MassHealth Median:	1.2%

3 visits		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	3	2,681	250	1.2%	0.0%	2.7%
NHP	(H)	4	3,457	260	1.5%	0.0%	3.2%
NH	(H)	6	3,061	376	1.6%	0.2%	3.0%
FCHP	(A)	2	224	224	0.9%	0.0%	2.3%
BMCHP	(H)	3	5,072	270	1.1%	0.0%	2.5%

2010 Comparison Rates—4 visits	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	15.3%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	12.6%
Nat'l Medicaid Mean:	10.7%
MA Commercial Mean:	2.3%
MassHealth Weighted Mean:	4.3%
MassHealth Median:	3.8%

4 visits		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	5	2,681	250	2.0%	0.1%	3.9%
NHP	(H)	10	3,457	260	3.8%	1.3%	6.4%
NH	(H)	20	3,061	376	5.3%	2.9%	7.7%
FCHP	(A)	6	224	224	2.7%	0.3%	5.0%
BMCHP	(H)	14	5,072	270	5.2%	2.4%	8.0%

2010 Comparison Rates—5 visits	
Nat'l Medicaid 90 <sup>th</sup> Percentile:	22.2%
Nat'l Medicaid 75 <sup>th</sup> Percentile:	18.9%
Nat'l Medicaid Mean:	16.5%
MA Commercial Mean:	7.7%
MassHealth Weighted Mean:	7.7%
MassHealth Median:	8.1%

5 visits		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	13	2,681	250	5.2%	2.2%	8.2%
NHP	(H)	18	3,457	260	6.9%	3.6%	10.2%
NH	(H)	36	3,061	376	9.6%	6.5%	12.7%
FCHP	(A)	24	224	224	10.7%	6.4%	15.0%
BMCHP	(H)	22	5,072	270	8.1%	4.7%	11.6%

The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2008.

# Appendix E:

PCC Plan Antidepressant Medication Management Rates for Members with Basic, Essential, and Non-Basic/Non-Essential Coverage

## PCC Plan Antidepressant Medication Management Rates for Members with Basic, Essential, and Non-Basic/Non-Essential Coverage

Effective Acute Phase Treatment					
2010	Num	Den	Rate	LCL	UCL
Basic	(A) 90	143	62.9%	54.7%	71.2%
Essential	(A) 330	577	57.2%	53.1%	61.3%
NonBasic/NonEssntl	(A) 795	1,616	49.2%	46.7%	51.7%

Effective Continuous Phase Treatment					
2010	Num	Den	Rate	LCL	UCL
Basic	(A) 56	143	39.2%	30.8%	47.5%
Essential	(A) 230	577	39.9%	35.8%	43.9%
NonBasic/NonEssntl	(A) 557	1,616	34.5%	32.1%	36.8%

# Appendix F:

PCC Plan Follow-up After Hospitalization  
for Mental Illness Rates for Members  
with Basic, Essential, and Non-Basic/  
Non-Essential Coverage

## PCC Plan Follow-up After Hospitalization for Mental Illness for Members with Basic, Essential, and Non-Basic/Non-Essential Coverage

7 Day					
2010	Num	Den	Rate	LCL	UCL
Basic	(A) 204	370	55.1%	49.9%	60.3%
Essential	(A) 624	1,324	47.1%	44.4%	49.9%
NonBasic/NonEssntl	(A) 2,600	4,614	56.4%	54.9%	57.8%

30 Day					
2010	Num	Den	Rate	LCL	UCL
Basic	(A) 279	370	75.4%	70.9%	79.9%
Essential	(A) 889	1,324	67.1%	64.6%	69.7%
NonBasic/NonEssntl	(A) 3,601	4,614	78.0%	76.8%	79.3%

# Appendix G:

## PCC Plan Mental Health Utilization Rates for Members with Basic, Essential, and Non-Basic/Non-Essential Coverage



## PCC Plan Mental Health Utilization for Members with Basic, Essential, and Non-Basic/Non-Essential Coverage

### Members with Basic Coverage

	<u>Member Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Outpatient/ED</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Ages 18-64	74,592	569	9.2%	770	12.4%	5,056	81.3%	5,153	82.9%

### Members with Essential Coverage

	<u>Member Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Outpatient/ED</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Ages 18-64	764,226	1,971	3.1%	2,326	3.7%	15,231	23.9%	15,711	24.7%

### Members with Non-Basic/Non-Essential Coverage

	<u>Member Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Outpatient/ED</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Ages 0-12	886,493	581	0.8%	1,938	2.6%	13,462	18.2%	13,282	18.0%
Ages 13-17	373,623	833	2.7%	1,818	5.8%	9,261	29.7%	9,296	29.9%
Ages 18-64	1,468,337	4,228	3.5%	6,081	5.0%	47,939	39.2%	48,491	39.6%
Ages Total	2,728,453	5,642	2.5%	9,837	4.3%	70,662	31.1%	71,069	31.3%

# Appendix H:

## Mental Health Utilization Rates, Age and Gender Stratifications, All Plans

## Mental Health Utilization—Percentage of Members Using Services

### Ages 0-12

#### Male

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	461,633	415	1.1%	1,284	3.3%	8,166	21.2%	8,208	21.3%
<b>NHP</b>	377,771	100	0.3%	345	1.1%	3,323	10.6%	3,394	10.8%
<b>NH</b>	316,714	89	0.3%	9	0.0%	3,860	14.6%	3,863	14.6%
<b>FCHP</b>	30,547	3	0.1%	0	0.0%	348	13.7%	349	13.7%
<b>BMCHP</b>	521,790	150	0.3%	99	0.2%	7,703	17.7%	7,708	17.7%

#### Female

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	424,871	166	0.5%	621	1.8%	4,957	14.0%	4,998	14.1%
<b>NHP</b>	365,282	22	0.1%	147	0.5%	2,101	6.9%	2,139	7.0%
<b>NH</b>	307,690	27	0.1%	2	0.0%	2,479	9.7%	2,480	9.7%
<b>FCHP</b>	28,732	0	0.0%	0	0.0%	188	7.9%	188	7.9%
<b>BMCHP</b>	505,731	71	0.2%	27	0.1%	4,764	11.3%	4,767	11.3%

#### Male

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	195,488	394	2.4%	956	5.9%	4,849	29.8%	4,939	30.3%
<b>NHP</b>	113,069	92	1.0%	265	2.8%	1,776	18.9%	1,865	19.8%
<b>NH</b>	81,709	76	1.1%	21	0.3%	1,260	18.5%	1,265	18.6%
<b>FCHP</b>	9,356	4	0.5%	1	0.1%	144	18.5%	144	18.5%
<b>BMCHP</b>	143,048	142	1.2%	44	0.4%	2,760	23.2%	2,765	23.2%

### Ages 13-17

#### Female

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	178,135	439	3.0%	847	5.7%	4,229	28.5%	4,280	28.8%
<b>NHP</b>	115,378	115	1.2%	276	2.9%	1,864	19.4%	1,919	20.0%
<b>NH</b>	79,836	89	1.3%	26	0.4%	1,324	19.9%	1,330	20.0%
<b>FCHP</b>	9,783	4	0.5%	0	0.0%	163	20.0%	163	20.0%
<b>BMCHP</b>	143,519	202	1.7%	82	0.7%	2,914	24.4%	2,922	24.4%

## Mental Health Utilization—Percentage of Members Using Services

### Ages 18-64

#### Male

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	1,100,610	3,685	4.0%	4,427	4.8%	28,830	31.4%	29,455	32.1%
<b>NHP</b>	158,209	289	2.2%	207	1.6%	2,804	21.3%	2,837	21.5%
<b>NH</b>	138,122	264	2.3%	83	0.7%	2,278	19.8%	2,333	20.3%
<b>FCHP</b>	19,545	26	1.6%	5	0.3%	305	18.7%	305	18.7%
<b>BMCHP</b>	223,666	514	2.8%	178	1.0%	4,694	25.2%	4,733	25.4%

#### Female

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	1,206,545	3,049	3.0%	4,428	4.4%	38,120	37.9%	38,625	38.4%
<b>NHP</b>	458,363	552	1.5%	541	1.4%	10,050	26.3%	10,103	26.5%
<b>NH</b>	341,702	461	1.6%	207	0.7%	7,382	25.9%	7,438	26.1%
<b>FCHP</b>	44,444	61	1.7%	24	0.7%	953	25.7%	962	26.0%
<b>BMCHP</b>	597,674	965	1.9%	454	0.9%	15,413	31.0%	15,480	31.1%

### Ages 65+\*

#### Male

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>NHP</b>	130	0	0.0%	0	0.0%	11	101.5%	11	101.5%
<b>NH</b>	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>FCHP</b>	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>BMCHP</b>	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%

#### Female

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>NHP</b>	174	1	6.9%	1	6.9%	23	158.6%	23	158.6%
<b>NH</b>	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>FCHP</b>	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>BMCHP</b>	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%

\* The MassHealth managed care program serves members under the age of 65. MassHealth members 65 years and older were included in the eligible populations for the HEDIS 2008 measures whenever the specifications for the measure included the 65 and older population, the members' coverage had not yet been terminated, and the members met all eligible population criteria such as the continuous enrollment and enrollment anchor date requirements.

## Mental Health Utilization—Percentage of Members Using Services

### All Age Groups - Totals By Gender

#### Male

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	1,757,731	4,494	3.1%	6,667	4.6%	41,845	28.6%	42,602	29.1%
<b>NHP</b>	649,179	481	0.9%	817	1.5%	7,914	14.6%	8,107	15.0%
<b>NH</b>	536,545	429	1.0%	113	0.3%	7,398	16.6%	7,461	16.7%
<b>FCHP</b>	59,448	33	0.7%	6	0.1%	797	16.1%	798	16.1%
<b>BMCHP</b>	888,505	806	1.1%	321	0.4%	15,157	20.5%	15,206	20.5%

#### Female

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	1,809,551	3,654	2.4%	5,896	3.9%	47,306	31.4%	47,903	31.8%
<b>NHP</b>	939,197	690	0.9%	965	1.2%	14,038	17.9%	14,184	18.1%
<b>NH</b>	729,232	577	1.0%	235	0.4%	11,185	18.4%	11,248	18.5%
<b>FCHP</b>	82,963	65	0.9%	24	0.4%	1,304	18.9%	1,313	19.0%
<b>BMCHP</b>	1,246,925	1,238	1.2%	563	0.5%	23,091	22.2%	23,169	22.3%

#### Total Male/Female: Ages 0-12

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	886,504	581	0.8%	1,905	2.6%	13,123	17.8%	13,206	17.9%
<b>NHP</b>	743,053	122	0.2%	492	0.8%	5,424	8.8%	5,533	8.9%
<b>NH</b>	624,404	116	0.2%	11	0.0%	6,339	12.2%	6,343	12.2%
<b>FCHP</b>	59,279	3	0.1%	0	0.0%	536	10.9%	537	10.9%
<b>BMCHP</b>	1,027,521	221	0.3%	126	0.2%	12,467	14.6%	12,475	14.6%

#### Total Male/Female: Ages 13-17

	<u>Member</u> <u>Months</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	373,623	833	2.7%	1,803	5.8%	9,078	29.2%	9,219	29.6%
<b>NHP</b>	228,447	207	1.1%	541	2.8%	3,640	19.1%	3,784	19.9%
<b>NH</b>	161,545	165	1.2%	47	0.4%	2,584	19.2%	2,595	19.3%
<b>FCHP</b>	19,139	8	0.5%	1	0.1%	307	19.3%	307	19.3%
<b>BMCHP</b>	286,567	344	1.4%	126	0.5%	5,674	23.8%	5,687	23.8%

## Mental Health Utilization—Percentage of Members Using Services

### All Age Groups - Totals By Gender

#### Total Male/Female: Ages 18-64

	<u>Member</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
	<u>Months</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	2,307,155	6,734	3.5%	8,855	4.6%	66,950	34.8%	68,080	35.4%
<b>NHP</b>	616,572	841	1.6%	748	1.5%	12,854	25.0%	12,940	25.2%
<b>NH</b>	479,824	725	1.8%	290	0.7%	9,660	24.2%	9,771	24.4%
<b>FCHP</b>	63,989	87	1.6%	29	0.5%	1,258	23.6%	1,267	23.8%
<b>BMCHP</b>	821,340	1,479	2.2%	632	0.9%	20,107	29.4%	20,213	29.5%

#### Total Male/Female: Ages 65+

	<u>Member</u>	<u>Inpatient</u>		<u>Intermediate</u>		<u>Ambulatory</u>		<u>Any Service</u>	
	<u>Months</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>PCCP</b>	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>NHP</b>	304	1	4.0%	1	4.0%	34	134.2%	34	134.2%
<b>NH</b>	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>FCHP</b>	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>BMCHP</b>	2	0	0.0%	0	0.0%	0	0.0%	0	0.0%

\* The MassHealth managed care program serves members under the age of 65. MassHealth members 65 years and older were included in the eligible populations for the HEDIS 2008 measures whenever the specifications for the measure included the 65 and older population, the members' coverage had not yet been terminated, and the members met all eligible population criteria such as the continuous enrollment and enrollment anchor date requirements.

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