December 2009

MassHealth Managed Care HEDIS® 2009 Final Report

Prepared by:

Center for Health Policy and Research (CHPR) in collaboration with the Mass-Health 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
Jianying Zhang

Office of Acute and Ambulatory Care
Louise Bannister
Sharon Hanson
Marlene Kane
Susan Maguire
Jennifer Maniates
Mary Ann Mark
Lana Miller

MassHealth Office of Behavioral Health
John DeLuca

Data Analysis and Performance Measurement
Amina Khan
Nicole Tibbetts

Table of Contents

Executive Summary

Introduction

The MassHealth Managed Care HEDIS® 2009 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 in this report are 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 for evaluation and reporting 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 2009

The MassHealth measurement set for 2009 focused on three domains: "staying healthy" (i.e., breast cancer screening, cervical cancer screening, prenatal and postpartum care and frequency of ongoing prenatal care), "living with illness" (i.e., comprehensive diabetes care, controlling high blood pressure, follow-up care for children prescribed attention-deficit/hyperactivity disorder (ADHD) medication, and initiation and engagement of alcohol and other drug dependency treatment), and "use of services" (i.e., identification of alcohol and other drug services).

Summary of Overall Results

Results from the MassHealth Managed Care HEDIS 2009 project demonstrate that MassHealth plans performed well overall when compared to the 2009 rates of 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 2009 (represented by the 2009 national Medicaid 75th percentile, obtained from NCQA's Quality Compass® database.)

MassHealth plans performed well, relative to this national benchmark, on measures in all three domains. All five MassHealth plans reported rates that were significantly above the 2009 national Medicaid 75th percentile for the measures assessing breast cancer screening and engagement of alcohol and other drug dependence treatment. Four plans reported rates that were significantly above the national Medicaid 75th percentile for the HbA1c testing component of the comprehensive diabetes care measure. Three of the five plans reported rates that were significantly above the national benchmark rates for cervical cancer screening and for initiation of follow-up care for children prescribed ADHD medication (though one plan fell below the benchmark on each of the two measures).

MassHealth plans' results were mixed for most of the remaining measures, with some plans performing above the benchmark, others with no statistically significant difference from the benchmark, and no more than one plan in each measure performing significantly below the benchmark. All but one component of the diabetes care measure followed this pattern, as did the measures for timeliness of prenatal care, controlling high blood pressure, continuation and maintenance of ADHD follow-up care, and initiation of alcohol and other drug treatment.

Opportunities for improvement were found in three of the measures: postpartum care, frequency of ongoing prenatal care (≥81% of expected visits), and the LDL-C control (<100 mg/dL) component of the diabetes care measure. Three of the five MassHealth plans scored significantly below the national Medicaid 75th percentile benchmark on each of these measures, and no plan exceeded the benchmark performance level.

Executive Summary (*continued*)

Breast Cancer Screening

- MassHealth managed care members aged 40-69 had a breast cancer screening rate of 64.9%.
- All five plans had rates significantly above the national Medicaid 75th percentile.
- Two plans (PCC Plan and NHP) reported rates that were significantly above their 2007 rates. Three plans (NH, FCHP, and BMCHP) reported rates that were not significantly different from their 2007 rates.

Cervical Cancer Screening

- MassHealth managed care members aged 21 to 64 had a cervical cancer screening rate of 77.4%.
- Three plans (NHP, FCHP, and BMCHP) performed significantly above the national Medicaid 75th percentile.
- All five plans had rates that were not significantly different from their 2007 rates.

Prenatal and Postpartum Care

- The MassHealth managed care timeliness of prenatal care rate was 84.4%. None of the plans performed significantly above the national Medicaid 75th percentile but four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different from this benchmark. One plan (NH) had a rate that was significantly above its 2007 rate.
- The MassHealth managed care postpartum care rate was 64.0%. None of the plans performed significantly above the national Medicaid 75th percentile but two plans (FCHP and BMCHP) had rates that were not significantly different from the benchmark. All five plans had rates that were not significantly different from their 2007 rates.

Frequency of Ongoing Prenatal Care

- Sixty-one percent (61.0%) of MassHealth managed care deliveries had ≥81% of the expected number of prenatal visits.
- None of the plans preformed significantly above the national Medicaid 75th percentile, although two plans (NHP and BMCHP) had rates that were not significantly different from this benchmark.
- One plan (NH) had a rate that was significantly above its 2007 rate.

Comprehensive Diabetes Care

- This measure assesses eight areas of diabetes care: HbA1c testing, poor HbA1c control (>9.0%), LDL-C testing, LDL-C control (<100 mg/dL), eye exams, monitoring kidney disease, blood pressure control of <130/80, and blood pressure control of <140/90.
- MassHealth managed care plans had rates that were significantly above and/or not significantly different from the national Medicaid 75th percentile, for six components of this measure. They include: HbA1c testing, poor HbA1c control (>9.0%), LDL-C testing, eye exams, medical attention for nephropathy, and blood pressure control (<140/90).
- One plan (BMCHP) had a rate for the HbA1c testing component that was significantly better than its 2007 rate. For all other plan/measure component combinations, 2009 rates were not statistically different from previous year comparison rates. (The PCC Plan did not report the diabetes care measures in 2007, so no historical data comparisons were made for this plan.)

Controlling High Blood Pressure

- Sixty-one percent (60.7%) of MassHealth managed care members aged 18 to 85 had a diagnosis of hypertension and had adequately controlled blood pressure.
- One plan (FCHP) had a rate that was significantly above the national Medicaid 75th percentile. Three plans (PCC Plan, NH, and BMCHP) had rates that met this benchmark.
- One plan (BMCHP) had a rate that was significantly above its 2007 rate while the other four plans (PCC Plan, NHP, NH, and FCHP) had rates that were not significantly different from their 2007 rates.

Follow-up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication

- The MassHealth managed care initiation phase rate was 54.9%. Three plans (PCC Plan, NHP, and NH) had rates that were significantly above the national Medicaid 75th percentile. All five plans had rates that were not significantly different from their 2007 rates.
- The MassHealth managed care continuation and maintenance phase rate was 63.7%. Three plans (PCC Plan, NHP, and NH) had rates that were significantly above the national Medicaid 75th percentile. Four plans (PCC Plan, NHP, NH, and BMCHP) had rates that were not significantly different from their 2007 rates.

Executive Summary (*continued*)

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

- The MassHealth managed care initiation of treatment rate was 49.1%. Two plans (NHP and FCHP) had rates that were above the national Medicaid 75th percentile and two plans (NH and BMCHP) had rates that were not significantly different from this benchmark. One plan (NHP) had a rate that was significantly above its 2007 rate and three plans (NH, FCHP, and PCC Plan) had rates that were not significantly different from their 2007 rates.
- The MassHealth managed care engagement of treatment rate was 23.6%. All five plans had rates that were significantly above the national Medicaid 75th percentile. Three plans (NH, FCHP, and PCC Plan) had rates that were significantly above their 2007 rates, and two plans (NHP and BMCHP) had rates that were not significantly different from their 2007 rates.

Identification of Alcohol and Other Drug Services

- Between 2.5% and 11.9% of members in each MassHealth plan identified as needing substance abuse services received such services. The percentage of members in each plan who received inpatient services ranged from 0.6% to 1.6%, intermediate services (intensive outpatient and partial hospitalization) from 0.3% to 3.8%, and ambulatory services from 2.2% to 10.9%.

Summary of MassHealth Managed Care HEDIS 2009 Results

HEDIS 2009 Measure	2009 National Medicaid 75th Percentile	PCCP rate	NHP rate	NH rate	FCHP rate	BMCHP rate
Breast Cancer Screening	57.4%	63.8%↑	68.9%↑	65.2%↑	69.5↑	66.5%↑
Cervical Cancer Screening	73.2%	72.5%↓	80.8%↑	76.7%	80.4%↑	82.0%↑
Prenatal and Postpartum Care						
Timeliness of Prenatal Care	89.4%	75.4%↓	86.7%	86.4%	88.8%	90.5%
Postpartum Care	68.5%	57.2%↓	63.2%↓	62.2%↓	66.0%	72.3%
Frequency of Ongoing Prenatal Care						
> 81+ percent	73.4%	45.0%↓	70.9%	60.2%↓	46.6%↓	71.0%
Comprehensive Diabetes Care						
HbA1C Screening	86.2%	89.8%↑	89.5%↑	89.1%	91.1%↑	95.1%↑
Poor HbA1c Control	35.2%	31.4%	34.5%	37.0%	32.0%	33.1%
LDL-C Screening	79.5%	83.9%↑	80.3%	83.2%	78.7%	82.5%
LDL-C Control (<100 mg/dL)	40.6%	38.4%	33.8%↓	33.6%↓	44.0%	35.8%↓
Eye Exam	62.3%	65.9%	66.9%	61.3%	72.4%↑	67.4%↑
Medical Attention for Nephropathy	82.2%	86.1%↑	80.5%	81.0%	82.7%	85.4%
Blood Pressure <130/80	36.3%	30.9%↓	37.5%	38.0%	37.3%	38.0%
Blood Pressure <140/90	66.4%	65.5%	70.1%	67.2%	74.2%↑	68.9%
Controlling High Blood Pressure	63.3%	60.1%	55.1%↓	59.6%	76.7% ↑	64.9%

Key:

PCCP—Primary Care Clinician Plan
NHP—Neighborhood Health Plan
NH—Network Health
FCHP—Fallon Community Health Plan
BMCHP—Boston Medical Center HealthNet Plan

↑ Indicates a rate that is significantly better than the 2009 national Medicaid 75th percentile.
↓ Indicates a rate that is significantly worse than the 2009 national Medicaid 75th percentile.

Summary of MassHealth Managed Care HEDIS 2009 Results (continued)

HEDIS 2009 Measure	2009 National Medicaid 75th Percentile	PCCP rate	NHP rate	NH rate	FCHP rate	BMCHP rate
Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication						
Initiation Phase	42.2%	63.8%↑	63.1%↑	60.6%↑	47.9%	37.3%↓
Continuation & Maintenance Phase	48.4%	73.4%↑	65.0%↑	76.9%↑	N/A*	42.0%↓
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment						
Initiation of Treatment	51.3%	46.6%↓	63.0%↑	52.7%	60.1%↑	52.2%
Engagement of Treatment	16.8%	22.2%↑	43.1%↑	21.6%↑	44.6%↑	21.7%↑

***** FCHP did not report results for this measure

Key:
PCCP—Primary Care Clinician Plan
NHP—Neighborhood Health Plan
NH—Network Health
FCHP—Fallon Community Health Plan
BMCHP—Boston Medical Center HealthNet Plan
↑ Indicates a rate that is significantly better than the 2009 national Medicaid 75th percentile.
↓ Indicates a rate that is significantly worse than the 2009 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) 2009 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.

The measures selected for the MassHealth Managed Care HEDIS 2009 project assess the performance of the five MassHealth plans that provided health care services to MassHealth managed care members during the 2008 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 12.

MassHealth HEDIS 2009 Measures

MassHealth selected nine measures for the HEDIS 2009 project. The nine measures included in the report assess health care quality in three key areas: staying healthy, living with illness, and use of services.

The staying healthy measures included in this report provide information on preventive services, member access, and availability of care. The specific topics evaluated in this report are breast cancer screening, cervical cancer screening, prenatal and postpartum care, and frequency of ongoing prenatal care.

Measures in the living with illness area provide information on how well plans help members manage their chronic illnesses. The specific topics evaluated in this report are comprehensive diabetes care, controlling high blood pressure, follow-up care for children prescribed attention-deficit/hyperactivity disorder (ADHD) medication, and initiation and engagement of alcohol and other drug dependence.

Use of service measures provide information about what services health plan members utilize. The specific service evaluated in the report is identification of alcohol and other drug services.

Note: MassHealth assesses member satisfaction through the biennial administration of a consumer survey. Member experiences in 2008 were assessed through a survey administered by the Massachusetts Health Quality Partners (MHQP). MHQP issued a report (jointly with CHPR) on the survey in the fall of 2009.

Organization of the MassHealth Managed Care HEDIS 2009 Report

This report presents the results of the MassHealth Managed Care HEDIS 2009 project in three sections. These sections are based on the consumer reporting domains used in NCQA's health plan report cards (Staying Healthy, Living with Illness, and Use of Services). These domains group clinical and access to care measures with similar characteristics.

REPORT SECTION	DEFINITION	MEASURES SELECTED BY MASSHEALTH FOR HEDIS 2007 REPORTING
Staying Healthy	These measures provide information about how well a plan provides services that maintain good health and prevent illness.	• Breast Cancer Screening • Cervical Cancer Screening • Frequency of Ongoing Prenatal Care • Prenatal and Postpartum Care
Living with Illness	These measures provide information about how well a plan helps people manage chronic illness.	• Comprehensive Diabetes Care • Controlling High Blood Pressure • Follow-up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication • Initiation and Engagement of Alcohol and Other Drug Dependency Treatment
Use of Services	These measures provide information about what services health plans members utilize.	• Identification of Alcohol and Other Drug Services

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

- **Appendix A** presents a list of the MassHealth regions and the service areas the regions cover.
- **Appendix B** presents additional data on Frequency of Ongoing Prenatal Care (<21%, 21-40%, 41-60% and 61-80% of expected visits, All Plans).
- **Appendix C** presents PCC Plan Breast Cancer Screening rates for members with Essential coverage.
- **Appendix D** presents PCC Plan Cervical Cancer Screening rates for members with Essential coverage.
- **Appendix E** presents age-stratified rates for Initiation and Engagement of Alcohol and Other Drug Dependency Treatment (All Plans).
- **Appendix F** presents age-stratified rates for PCC Plan members with Basic, Essential, and Non-Basic/Non-Essential Coverage for Initiation and Engagement of Alcohol and Other Drug Dependency Treatment.
- **Appendix G** presents age and gender-stratified rates for Identification of Alcohol and Other Drug Services (All Plans).
- **Appendix H** presents Identification of Alcohol and Other Drug Services rates for PCC Plan members with Basic, Essential, and Non-Basic/Non-Essential Coverage.

Organization of the MassHealth Managed Care HEDIS 2009 Report

Name of measure

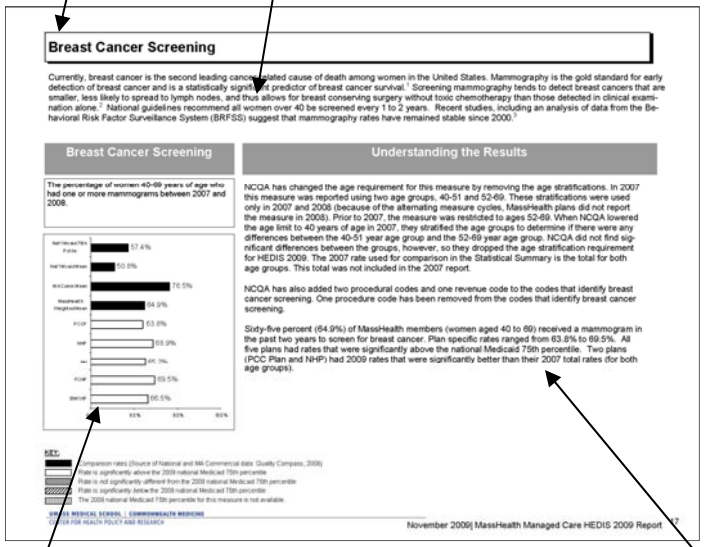
Information on the intent of each measure, including any clinical guidelines on which it is based

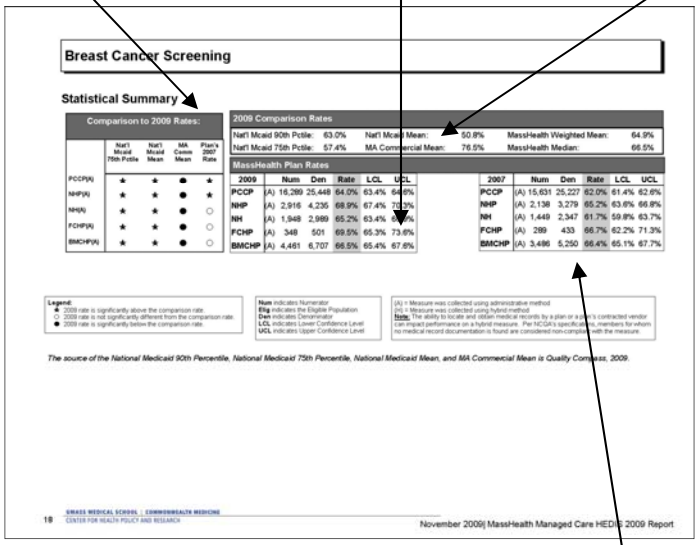
Statistical summary comparing plan rates to comparison rates named at the top of each column

★ 2009 rate is significantly above the comparison rate
○ 2009 rate is not significantly different from the comparison rate
● 2009 rate is significantly below the comparison rate

Individual HEDIS 2009 plan data including numerator, eligible population (where applicable) denominator, reported rate, and upper and lower confidence intervals

The 2009 national Medicaid 75th percentile is listed as a benchmark. The 2009 national Medicaid 90th percentile, 2009 national Medicaid mean, 2009 Massachusetts commercial mean, and 2009 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 2007, if available and if there were no significant changes to the measure's specifications that prohibited comparisons to prior year

Health Plan Profiles

MassHealth managed care plans provided care to 681,923 Massachusetts residents as of December 31, 2008. The MassHealth Managed Care HEDIS 2009 report includes data from the five MassHealth plans serving members enrolled in Managed Care. 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).

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.
- 284,844 MassHealth members as of December 31, 2008.
- 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 members with Essential coverage. 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). Currently, the PCC Plan is the only MassHealth plan serving members with Essential coverage. Approximately 20% 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.
- 122,639 MassHealth members as of December 31, 2008.
- 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.
- 96,754 MassHealth members as of December 31, 2008.
- 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 are provided by Network Health providers.

Fallon Community Health Plan (FCHP)

- Non-profit managed care organization that serves commercial, Medicare, Medicaid, and Commonwealth Care populations.
- 10,961 MassHealth members as of December 31, 2008.
- Primary service areas 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.
- 166,725 MassHealth members as of December 31, 2008.
- 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 MassHealth 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 measure.

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 2009 performance of the five plans.

Health Plan Profiles: Demographic Characteristics of the Plan Populations

MassHealth Plan	Total MassHealth Managed Care Members as of 12/31/08	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	226,667	56.3%	30.8%	25.9	28.9%	15.8%	26.8%	28.5%	0.0%
Essential population only	58,177	32.0%	0.0%	38.3	0.0%	0.0%	53.6%	46.4%	0.0%
Neighborhood Health Plan	122,639	59.1%	5.2%	17.6	44.5%	17.4%	26.1%	12.1%	0.0%
Network Health	96,754	57.4%	8.0%	17.3	46.9%	15.3%	25.3%	12.4%	0.0%
Fallon Community Health Plan	10,961	58.6%	9.7%	16.0	38.3%	15.8%	30.8%	15.1%	0.0%
Boston Medical Center HealthNet Plan	166,725	58.4%	11.0%	17.7	45.5%	16.0%	26.0%	12.5%	0.0%
Total for MassHealth Managed Care Program	**681,923**	**55.5%**	**15.1%**	**22.1**	**36.0%**	**14.7%**	**28.6%**	**20.7%**	**0.0%**

Source: MMIS

* PCC Plan HEDIS results presented in the main body of the report include all members, including those with Essential coverage. Comparisons of statistical significance below are also based on the entire PCCP population (284,844).
** 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 2009, 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 2009 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 PCCP ($p<.0001$). NH had a significantly lower proportion of females than the other three MCOs ($p<.05$), and BMC had a significantly lower proportion of females than NHP ($p<.001$).

Disabled Members: PCCP had a significantly higher proportion of disabled members than any of the four MCOs ($p<.0001$). All observed differences between MCOs are significant ($p<.001$).

Mean Age of Members: All four MCOs had a population whose mean age was significantly lower than that of PCCP ($p<.0001$). All observed differences between MCOs are significant ($p<.05$).

Data Collection and Analysis Methods

Data Collection and Submission

In November 2008, the MassHealth Office of Acute and Ambulatory Care (OAAC) provided plans with a list of measures to be collected for HEDIS 2009. 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 2009 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.

All plans undergoing NCQA accreditation must have their HEDIS data audited. The purpose of an NCQA HEDIS Compliance Audit™ is to validate a plan's HEDIS results by verifying the integrity of the plan's data collection and calculation processes. NCQA HEDIS Compliance Audits are independent reviews conducted by organizations or individuals licensed or certified by NCQA. NCQA's Quality Compass, the database from which many of the benchmarks in this report are drawn, reports only audited data. The current MassHealth contract with the four MCOs does not require plans to have their data audited. However, the new contract requires NCQA Accreditation, of which the Compliance Audit is a component. BMCHP, FCHP, and NHP have achieved NCQA accreditation for their MassHealth plans, while NH is working toward it.

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 serve 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 2009 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 vary for each measure and specify 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 2009 Volume 2: Technical Specifications*.

MassHealth Coverage Types Included in HEDIS 2009

MassHealth has four Medicaid coverage types whose members are eligible to enroll in any of the five MassHealth plans: Basic, Standard, CommonHealth, and Family Assistance. A fifth coverage type, MassHealth Essential, only permits enrollment in the PCC Plan. 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 20 percent of the PCC Plan's membership has MassHealth Essential coverage.

Data Collection and Analysis Methods (*continued*)

Because members with Essential coverage have been restricted to enrolling in the PCC Plan, previous years' HEDIS reports have not included Essential members in the PCC Plan's rates. Instead, Essential member data has been reported separately, in appendices. However, starting in calendar year 2010, Essential members will be able to enroll in the MCOs, so the rationale for excluding them from the PCC Plan's rates will no longer be valid.

In preparation for this change, MassHealth decided to begin including Essential members in the PCC Plan's rates for the HEDIS 2009 report. This change should be kept in mind when comparing the PCC Plan's 2009 rates to prior years. (Some measures, such as those relating to prenatal and postpartum care, will not capture any Essential members, since pregnant women automatically become eligible for MassHealth Standard.) As in previous years, appendices will be provided for certain measures, giving separate rates for members with Essential (as well as Basic) coverage, for reference purposes.

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℠ purchased from a vendor. For measures collected through the administrative method, the denominator includes all members who satisfy all criteria specified in the measure specifications, 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, test, vaccination, 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 oversample 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 2009 results from each plan are compared to several benchmarks and comparison rates, including the 2009 national Medicaid mean and the 2009 Massachusetts Commercial mean. In addition, MassHealth medians and weighted means were calculated from the five plans' 2009 data.

2009 National Medicaid 75th Percentile

For this report, the 2009 national Medicaid 75th percentile serves as the primary benchmark to which plan performance is compared (including statistical significance).

CHPR obtained the 2009 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 2009 national Medicaid mean, 2009 national Medicaid 90th percentile, 2009 Massachusetts commercial mean, 2009 MassHealth weighted mean, and 2009 MassHealth median.

The 2009 national Medicaid mean is the average performance of all Medicaid plans that submitted HEDIS 2009 data. The 2009 national Medicaid 90th percentile represents a level of performance that was exceeded by only the top 10% of all Medicaid plans that submitted HEDIS 2009 data. The 2009 national Medicaid 90th percentile was included as a future goal for MassHealth plans. The 2009 Massachusetts commercial mean is the average performance of all Massachusetts commercial plans that submitted HEDIS 2009 data. Although the populations served by commercial

Certified HEDIS Software℠ is a service mark of the National Committee for Quality Assurance (NCQA).

Data Collection and Analysis Methods (*continued*)

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 2009 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 41.8% of all MassHealth members, and the smallest (FCHP) serves only 1.6%. Because of the differences in the size of the populations served by the plans, the MassHealth weighted mean was not used for tests of statistical significance.

The 2009 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 12, 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 12. The impact of these differences on MassHealth HEDIS 2009 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,
- Voluntary review by an NCQA-Certified HEDIS auditor,
- Choice of administrative or hybrid data collection method for measures that allow either method.

Limitations of Certain HEDIS Measures
One measure collected in 2009, Identification of Alcohol and Other Drug Services, provides information on the services MassHealth members utilized, but not on the content or quality of the care the members received. Data for this measure 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 rate of utilization of these services 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.

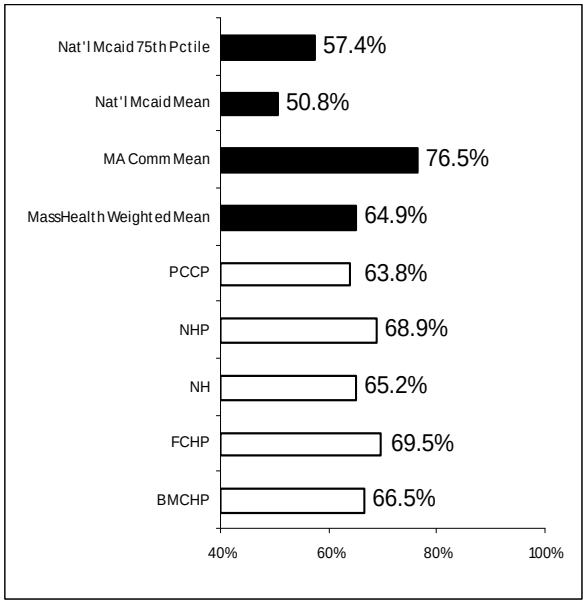
Staying Healthy

Breast Cancer Screening

Currently, breast cancer is the second leading cancer-related cause of death among women in the United States. Mammography is the gold standard for early detection of breast cancer and is a statistically significant predictor of breast cancer survival.[1] Screening mammography tends to detect breast cancers at an earlier stage, when they are smaller and less likely to spread to lymph nodes. Cancers found through mammography are better candidates for breast conserving surgery (without toxic chemotherapy), compared with those detected by clinical examination alone.[2] National guidelines recommend all women over 40 be screened every 1 to 2 years. Recent studies, including an analysis of data from the Behavioral Risk Factor Surveillance System (BRFSS) suggest that mammography rates have remained stable since 2000.[3]

Breast Cancer Screening

The percentage of women 40-69 years of age who had one or more mammograms between 2007 and 2008.



Understanding the Results

NCQA has changed the age requirement for this measure by removing the age stratifications. In 2007 this measure was reported using two age groups, 40-51 and 52-69. These stratifications were used only in 2007 and 2008 (because of the alternating measure cycles, MassHealth plans did not report the measure in 2008). Prior to 2007, the measure was restricted to ages 52-69. When NCQA lowered the age limit to 40 years of age in 2007, they stratified the age groups to determine if there were any differences between the 40-51 year age group and the 52-69 year age group. NCQA did not find significant differences between the groups, so they dropped the age stratification requirement for HEDIS 2009. The 2007 rate used for comparison in the Statistical Summary is the total for both age groups. This total was not included in the 2007 report, but was calculated at the time.

Sixty-five percent (64.9%) of MassHealth members (women aged 40 to 69) received a mammogram in the past two years to screen for breast cancer. Plan specific rates ranged from 63.8% to 69.5%. All five plans had rates that were significantly above the national Medicaid 75th percentile. Two plans (PCC Plan and NHP) had 2009 rates that were significantly better than their 2007 total rates (for both age groups).

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile
- The 2009 national Medicaid 75th percentile for this measure is not available.

Breast Cancer Screening

Statistical Summary

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(A)	★	★	●	★
NHP(A)	★	★	●	★
NH(A)	★	★	●	○
FCHP(A)	★	★	●	○
BMCHP(A)	★	★	●	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	63.0%	Nat'l Mcaid Mean:	50.8%	MassHealth Weighted Mean:	64.9%
Nat'l Mcaid 75th Pctile:	57.4%	MA Commercial Mean:	76.5%	MassHealth Median:	66.5%

MassHealth Plan Rates

2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	18,164	28,467	63.8%	63.2%	64.4%
NHP	(A)	2,916	4,235	68.9%	67.4%	70.3%
NH	(A)	1,948	2,989	65.2%	63.4%	66.9%
FCHP	(A)	348	501	69.5%	65.3%	73.6%
BMCHP	(A)	4,461	6,707	66.5%	65.4%	67.6%

2007		Num	Den	Rate	LCL	UCL
PCCP	(A)	15,631	25,227	62.0%	61.4%	62.6%
NHP	(A)	2,138	3,279	65.2%	63.6%	66.8%
NH	(A)	1,449	2,347	61.7%	59.8%	63.7%
FCHP	(A)	289	433	66.7%	62.2%	71.3%
BMCHP	(A)	3,486	5,250	66.4%	65.1%	67.7%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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

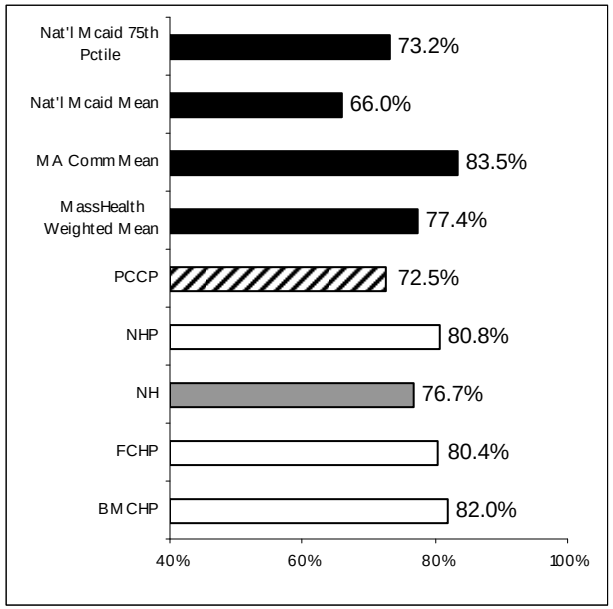
The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2009.

Cervical Cancer Screening

The National Cancer Institute estimates that there will be 11,270 new cases of cervical cancer in the United States in 2009, resulting in 4,070 deaths.[4] The death rate from cervical cancer continues to decline by nearly 4% each year.[5] With a 71% five-year survival rate, cervical cancer is highly curable, particularly if it is detected and treated early. Because early stage cervical cancers usually have no symptoms, regular Pap tests are crucial to identifying cancers before they become invasive. According to the American Cancer Society, between 60% and 80% of women with newly diagnosed invasive cervical cancer have not had a Pap test in the past 5 years, and many of these women have never had a Pap test.[6]

Cervical Cancer Screening

The percentage of women 21-64 years of age who received one or more Pap tests to screen for cervical cancer between 2006 and 2008.



Understanding the Results

Seventy-four percent (77.4%) of MassHealth members (women aged 21 to 64) received one or more Pap tests to screen for cervical cancer. Plan specific rates ranged from 72.5% to 82.0%. Three plans (NHP, FCHP, and BMCHP) had rates that were significantly above the national Medicaid 75th percentile. One plan's (PCC Plan) rate was significantly below the national Medicaid 75th Percentile. None of the plans had rates that were significantly different from their 2007 rates.

The HEDIS Cervical Cancer Screening measure evaluates whether women had at least one Pap test in the measurement year or two years prior to the measurement year. Many women prefer to have annual screenings, but according to the US Preventative Services Task Force and the American Cancer Society, an interval of three years between screenings is appropriate for most women. However, doctors may be reluctant to reduce the frequency of screening, because annual Pap tests bring women into their office, and women may be resistant to less frequent screening.[7]

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile
- The 2009 national Medicaid 75th percentile for this measure is not available.

Cervical Cancer Screening

Statistical Summary

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(A)	●	★	●	○
NHP(H)	★	★	○	○
NH(H)	○	★	●	○
FCHP(H)	★	★	○	○
BMCHP(H)	★	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	79.5%	Nat'l Mcaid Mean:	66.0%	MassHealth Weighted Mean:	77.4%
Nat'l Mcaid 75th Pctile:	73.2%	MA Commercial Mean:	83.5%	MassHealth Median:	80.4%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(A)	27,595	38,087	38,087	72.5%	72.0%	72.9%
NHP	(H)	177	20,277	219	80.8%	75.4%	86.3%
NH	(H)	240	14,061	313	76.7%	71.8%	81.5%
FCHP	(H)	176	2,118	219	80.4%	74.9%	85.9%
BMCHP	(H)	337	27,770	411	82.0%	78.2%	85.8%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	243	35,592	328	74.1%	69.2%	79.0%
NHP	(H)	350	18,145	411	85.2%	81.6%	88.7%
NH	(H)	248	10,920	328	75.6%	70.8%	80.4%
FCHP	(H)	350	1,936	411	85.2%	81.6%	88.7%
BMCHP	(H)	333	24,992	411	81.0%	77.1%	84.9%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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.

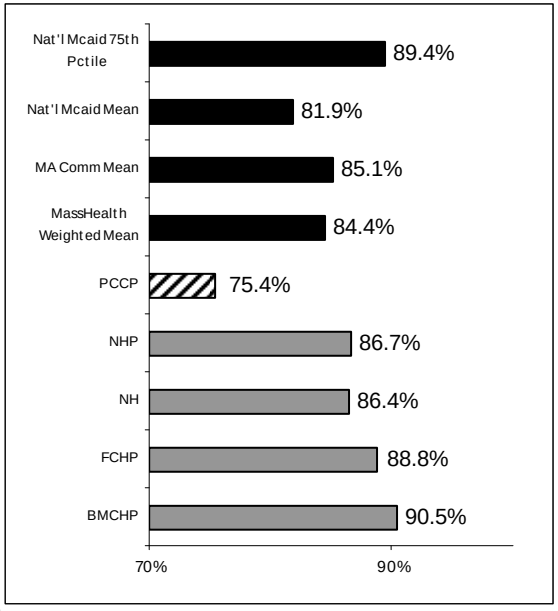
The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2009.

Prenatal and Postpartum Care

The U.S. infant mortality rate (the rate at which babies less than one year of age die) has declined by 2% between 2005 and 2006. Despite this, the U.S. infant mortality rate ranked 29th among all industrialized nations, with 6.7 deaths per 1,000 live births.[8] The leading causes of infant mortality in the U.S. are congenital malformations, disorders related to pre-term birth and low-birth weight, and Sudden Infant Death Syndrome (SIDS).[9] Prenatal visits in the first trimester provide an opportunity for early risk assessment (including screening for tobacco, alcohol, drug use, and domestic violence), health promotion (including discussion of exercise habits and environmental hazards) and medical, nutritional, and psychosocial interventions that can help ensure good clinical outcomes for both mother and child. Similarly, routine postpartum care between three and eight weeks after delivery helps to ensure good outcomes. These visits provide the opportunity for not only a physical exam, but also counseling on continued breastfeeding, family planning, and post-partum depression.[10]

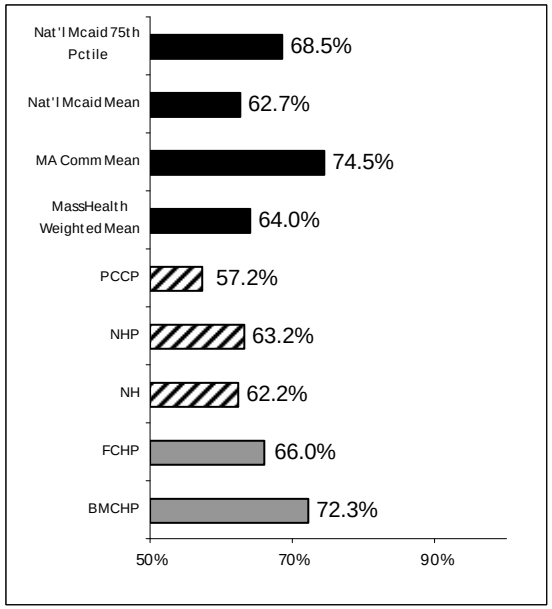
Timeliness of Prenatal Care

The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization.



Postpartum Care

The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile

Understanding the Results

Eighty-four percent (84.4%) of MassHealth members received a prenatal care visit in their first trimester or within 42 days. Plan specific rates ranged from 75.4% to 90.5%. Four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different than the national Medicaid 75th percentile. One plan (PCC Plan) had a rate that was significantly below the national Medicaid 75th percentile. One plan (NH) had a rate that was significantly above its 2007 rate; while, another plan (PCC Plan) had a rate that was significantly below its 2007 rate. The rest of the plan rates did not significantly differ from their 2007 rate.

Sixty-four percent (64.0%) of MassHealth members had a postpartum visit on or between 21 and 56 days after delivery. Plan specific rates ranged from 57.2% to 72.3%. Two plans (FCHP and BMCHP) had rates that were not significantly different from the national Medicaid 75th percentile, while three plans (PCC Plan, NHP, and NH) had rates that were significantly below the Medicaid rate. All five plans had rates that were not significantly different from their 2007 rates.

A study of national HEDIS timeliness of prenatal care rates suggested that observed rates underestimate the quality of prenatal care. The study found significantly higher rates of prenatal visits in the first trimester through patient survey and medical record review compared to HEDIS rates based on

(Continued on page 23)

Prenatal and Postpartum Care

Statistical Summary — Timeliness of Prenatal Care

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H)	●	●	●	●
NHP(H)	○	★	○	○
NH(H)	○	★	○	★
FCHP(H)	○	★	○	○
BMCHP(H)	○	★	★	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	92.2%	Nat'l Mcaid Mean:	81.9%	MassHealth Weighted Mean:	84.4%
Nat'l Mcaid 75th Pctile:	89.4%	MA Commercial Mean:	85.1%	MassHealth Median:	86.7%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	310	4,752	411	75.4%	71.1%	79.7%
NHP	(H)	351	3,501	405	86.7%	83.2%	90.1%
NH	(H)	350	2,606	405	86.4%	83.0%	89.9%
FCHP	(H)	261	296	294	88.8%	85.0%	92.6%
BMCHP	(H)	372	4,687	411	90.5%	87.6%	93.5%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	362	5,150	411	88.1%	84.8%	91.3%
NHP	(H)	351	3,303	403	87.1%	83.7%	90.5%
NH	(H)	292	2,164	411	71.0%	66.5%	75.6%
FCHP	(H)	256	287	287	89.2%	85.4%	93.0%
BMCHP	(H)	371	4,408	411	90.3%	87.3%	93.3%

Statistical Summary — Postpartum Care

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H)	●	●	●	○
NHP(H)	●	○	●	○
NH(H)	●	○	●	○
FCHP(H)	○	○	●	○
BMCHP(H)	○	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	72.7%	Nat'l Mcaid Mean:	62.7%	MassHealth Weighted Mean:	64.0%
Nat'l Mcaid 75th Pctile:	68.5%	MA Commercial Mean:	74.5%	MassHealth Median:	63.2%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	235	4,752	411	57.2%	52.3%	62.1%
NHP	(H)	256	3,501	405	63.2%	58.4%	68.0%
NH	(H)	252	2,606	405	62.2%	57.4%	67.1%
FCHP	(H)	194	296	294	66.0%	60.4%	71.6%
BMCHP	(H)	297	4,687	411	72.3%	67.8%	76.7%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	227	5150	411	55.2%	50.3%	60.2%
NHP	(H)	226	3303	403	56.1%	51.1%	61.0%
NH	(H)	250	2164	411	60.8%	56.0%	65.7%
FCHP	(H)	193	287	287	67.2%	61.6%	72.9%
BMCHP	(H)	264	4408	411	64.2%	59.5%	69.0%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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, 2009.

Understanding the Results (continued)

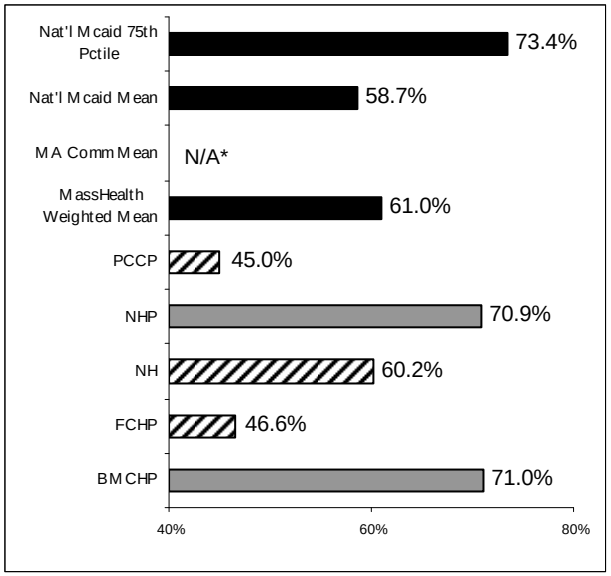
administrative data or administrative data combined with medical record data. The study also found that HEDIS rates are heavily influenced by missing medical records, and that using the baby's birth date (from administrative data) yields underestimated rates when delivery occurs before the estimated delivery date (EDD).[11]

Frequency of Ongoing Prenatal Care

Ongoing monitoring throughout pregnancy is necessary to prevent complications that can threaten the health of both mother and child, to monitor fetal development, and to help prepare the woman for delivery. The American College of Obstetrics and Gynecology (ACOG) recommends that women have prenatal visits every four weeks for the first 28 weeks of pregnancy, every two to three weeks for the seven weeks until 36 weeks, and then weekly until delivery. (Although the HEDIS measure is based on the ACOG guidelines, many MassHealth managed care plans follow guidelines from the Massachusetts Health Quality Partnership, which recommends monthly visits up to 28 weeks, visits every two weeks until 36 weeks, and then visits once a week until delivery.) The percentage of expected visits a women has throughout her pregnancy, based on gestational age and the time of enrollment, provides important information on the adequacy of prenatal care. This measure only provides information on the number of visits, however, and does not indicate whether the timing, content, or distribution of those visits throughout the pregnancy was appropriate.

≥ 81% of Expected Visits

The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received 81% or more of the expected prenatal visits.



KEY:

* This measure is collected for Medicaid populations only.

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile

Understanding the Results

Sixty-one percent (61.0%) of MassHealth members who delivered between November 6 of the year prior to the measurement year and November 5 of the measurement year received 81% or more of the expected number of prenatal visits. Plan specific rates ranged from 45.0% to 71.0%. Two plans (NHP and BMCHP) had rates that were not significantly different from the national Medicaid 75th percentile rate and three plans (PCC Plan, NH, and FCHP) had rates that were significantly below the Medicaid rate. One plan (NH) had a rate that was significantly above its 2007 rate, while two plans (NHP and BMCHP) had rates that were not significantly different than their 2007 rates and two plans (PCC Plan and FCHP) had rates that were significantly below their 2007 rates.

A number of individual and systemic factors may affect the likelihood of pregnant women receiving the recommended number of prenatal visits. These factors include health insurance status prior to conception,[12] whether or not the pregnancy was wanted and/or planned,[13] and demographic characteristics, especially race and ethnicity.[14] Other research has found the impact of logistical barriers, such as lack of transportation, to be smaller than previously thought.[15]

Frequency of Ongoing Prenatal Care

Statistical Summary — ≥81% of Expected Visits

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean*	Plan's 2007 Rate
PCCP(H)	●	●	n/a	●
NHP(H)	○	★	n/a	○
NH(H)	●	○	n/a	★
FCHP(H)	●	●	n/a	●
BMCHP(H)	○	★	n/a	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	81.0%	Nat'l Mcaid Mean:	58.7%	MassHealth Weighted Mean:	61.0%
Nat'l Mcaid 75th Pctile:	73.4%	MA Commercial Mean:	n/a*	MassHealth Median:	60.2%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	185	4,752	411	45.0%	40.1%	49.9%
NHP	(H)	287	3,501	405	70.9%	66.3%	75.4%
NH	(H)	244	2,606	405	60.2%	55.4%	65.1%
FCHP	(H)	137	296	294	46.6%	40.7%	52.5%
BMCHP	(H)	292	4,687	411	71.0%	66.5%	75.6%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	256	5,150	411	62.3%	57.5%	67.1%
NHP	(H)	271	3,303	403	67.2%	62.5%	72.0%
NH	(H)	203	2,164	411	49.4%	44.4%	54.3%
FCHP	(H)	209	287	287	72.8%	67.5%	78.1%
BMCHP	(H)	255	4,408	411	62.0%	57.2%	66.9%

* This is a Medicaid-only measure.

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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, 2009.

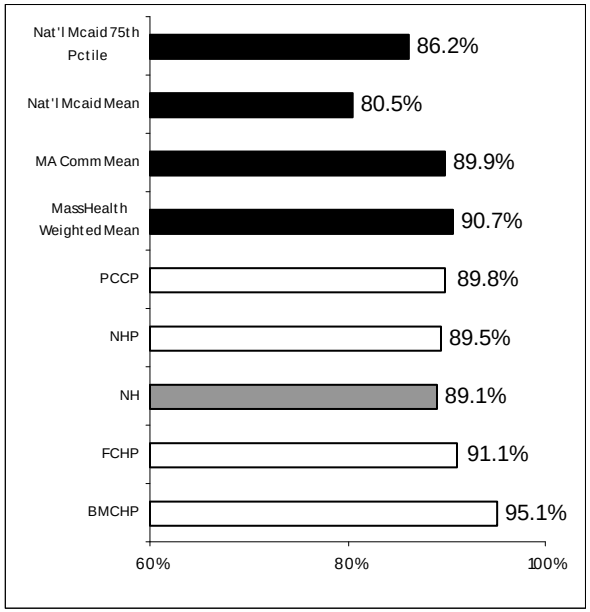
Living With Illness

Comprehensive Diabetes Care

Current estimates suggest that almost 24 million Americans, or nearly 8% of the total population, have type 1 or type 2 diabetes.[16] Diabetes prevalence has increased dramatically in recent decades, with type 2 diabetes rates doubling in the last three decades among the middle-aged.[17] Diabetes can lead to significant health complications such as heart disease, stroke, kidney disease, blindness, and amputations. Controlling levels of blood glucose, blood pressure, and cholesterol, and receiving timely preventative care are all crucial to preventing diabetes-related complications. This composite HEDIS measure assesses the effectiveness of diabetes care provided to MassHealth members using a single sample of members ages 18-75* who have type 1 or type 2 diabetes.

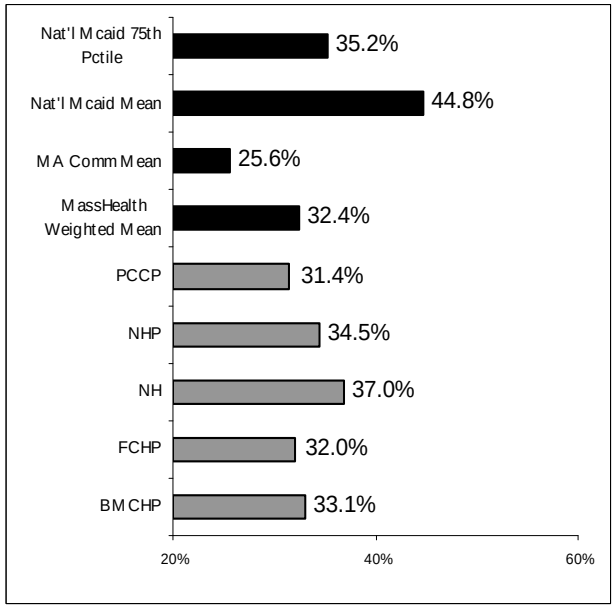
HbA1c Testing

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) who had Hemoglobin A1c (HbA1c) testing during 2008.



Poor HbA1c Control (>9.0%)

The percentage of members 18-75* years of age with diabetes (type 1 or type2) who had poor HbA1c control (>9.0%) during 2008. (Note: for this measure, a lower percentage represents higher quality.)



Understanding the Results

Ninety-one percent (90.7%) of MassHealth members 18-75 years of age with diabetes (type 1 or type 2) had an Hemoglobin A1c test during 2008. Individual plan rates ranged from 89.1% to 95.1%. Four plans (PCC Plan, NHP, FCHP, and BMCHP) had rates that were significantly above the national Medicaid 75th percentile rate while one plan (NH) was not significantly different that the Medicaid rate. One plan (BMCHP) had a rate that was significantly above its 2007 rate while three plans (NHP, NH, and FCHP) had rates that were not significantly different than their 2007 rates. The PCC Plan did not report this measure in 2007.

Thirty-two percent (32.4%) of MassHealth members 18-75 years of age with diabetes (type 1 or type 2) had poor HbA1c control during 2008. The plan specific rates ranged from 31.4% to 37.0%. All five plans had rates that were not statistically different that the national Medicaid 75th percentile rate. All four plans that reported data in 2007 (NHP, NH, FCHP, and BMCHP) had 2009 rates that were not statistically different. The PCC Plan did not report this measure in 2007.

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile

* This measure's age range is 18-75. Although the MassHealth managed care program generally serves members under the age of 65, members 65 and older occasionally appear in the denominator of a plan's HEDIS rate (see page 13 for more information). MassHealth members 65 and older were included in the eligible population for this measure if the member met all eligible population criteria, including enrollment criteria.

Comprehensive Diabetes Care

Statistical Summary — HbA1c Testing

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) *	★	★	○	n/a
NHP(H)	★	★	○	○
NH(H)	○	★	○	○
FCHP(H)	★	★	○	○
BMCHP(H)	★	★	★	★

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	89.3%	Nat'l Mcaid Mean:	80.5%	MassHealth Weighted Mean:	90.7%
Nat'l Mcaid 75th Pctile:	86.2%	MA Commercial Mean:	89.9%	MassHealth Median:	89.8%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	369	13,972	411	89.8%	86.7%	92.8%
NHP	(H)	368	1,664	411	89.5%	86.5%	92.6%
NH	(H)	366	1,649	411	89.1%	85.9%	92.2%
FCHP	(H)	205	248	225	91.1%	87.2%	95.1%
BMCHP	(H)	391	3,819	411	95.1%	92.9%	97.3%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	375	1,392	411	91.2%	88.4%	94.1%
NH	(H)	344	1,290	411	83.7%	80.0%	87.4%
FCHP	(H)	151	170	167	90.4%	85.7%	95.2%
BMCHP	(H)	365	3,210	411	88.8%	85.6%	92.0%

* PCCP did not collect or report the Comprehensive Diabetes Care measure for HEDIS 2007.

Statistical Summary — Poor HbA1c Control (>9.0)

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) *	○	★	●	n/a
NHP(H)	○	★	●	○
NH(H)	○	★	●	○
FCHP(H)	○	★	●	○
BMCHP(H)	○	★	●	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	29.3%	Nat'l Mcaid Mean:	44.8%	MassHealth Weighted Mean:	32.4%
Nat'l Mcaid 75th Pctile:	35.2%	MA Commercial Mean:	25.6%	MassHealth Median:	33.1%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	129	13,972	411	31.4%	26.8%	36.0%
NHP	(H)	142	1,664	411	34.5%	29.8%	39.3%
NH	(H)	152	1,649	411	37.0%	32.2%	41.8%
FCHP	(H)	72	248	225	32.0%	25.7%	38.3%
BMCHP	(H)	136	3,819	411	33.1%	28.4%	37.8%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	131	1,392	411	31.9%	27.2%	36.5%
NH	(H)	172	1,290	411	41.8%	37.0%	46.7%
FCHP	(H)	52	170	167	31.1%	23.8%	38.5%
BMCHP	(H)	170	3,210	411	41.4%	36.5%	46.2%

Legend:
- ★ 2009 rate is significantly above (HbA1c testing) or below (Poor HbA1c Control) the comparison rate.
- ○ 2009 rate is not significantly different from the comparison rate.
- ● 2009 rate is significantly below (HbA1c testing) or above (Poor HbA1c Control) the comparison rate.

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

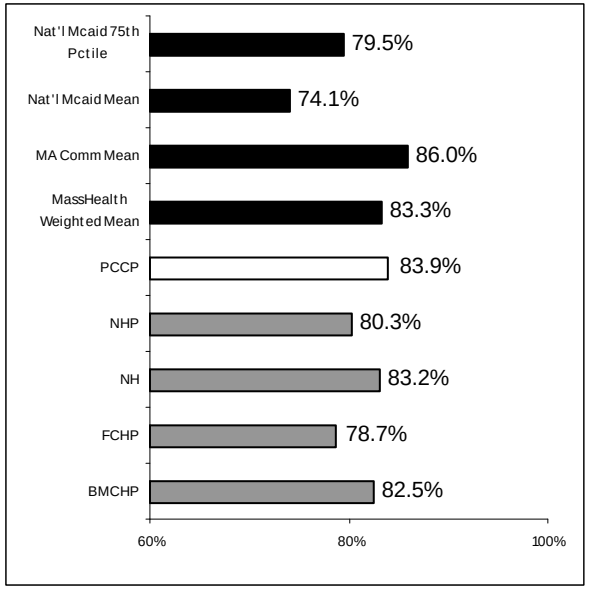
(H) = Measure was collected using hybrid method
Note: The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant 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, 2009.

Comprehensive Diabetes Care

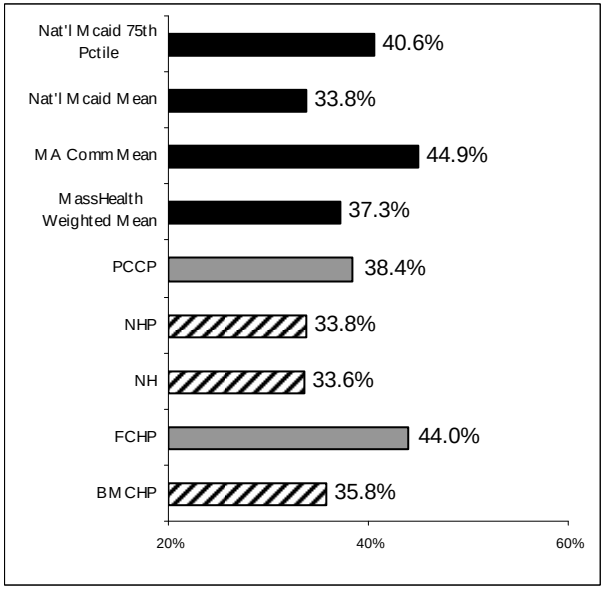
LDL-C Testing

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) who had LDL-C testing during 2008.



LDL-C Control

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) who had an LDL-C test in 2008 with a result of <100 mg/dL.



Understanding the Results

Eighty-three percent (83.3%) of MassHealth members 18 to 75 years of age with diabetes (type 1 or type 2) had LDL-C testing during 2008. Individual plan rates ranged from 78.7% to 83.9%. One plan (PCC Plan) had a rate that was significantly above the national Medicaid 75th percentile rate while the other 4 plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different from the Medicaid rate. Four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different from their 2007 rates. The PCC Plan did not report this measure in 2007.

Thirty-seven percent (37.3%) of MassHealth members 18 to 75 years of age with diabetes (type 1 or type 2) had an LDL test in 2008 with a result of <100 mg/dL. Plan specific rates ranged from 33.6% to 44.0%. Two plans (PCC Plan and FCHP) had rates that were not significantly different that the national Medicaid 75th percentile rate. Three plans (NHP, NH and BMCHP) had rates that were significantly below the Medicaid 75th percentile rate. All four plans that reported data in 2007 (NHP, NH, FCHP, and BMCHP) had 2009 rates that were not statistically different. The PCC Plan did not report this measure in 2007.

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile

* This measure's age range is 18-75. Although the MassHealth managed care program generally serves members under the age of 65, members 65 and older occasionally appear in the denominator of a plan's HEDIS rate (see page 13 for more information). MassHealth members 65 and older were included in the eligible population for this measure if the member met all eligible population criteria, including enrollment criteria.

Comprehensive Diabetes Care

Statistical Summary — LDL-C Screening

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) *	★	★	○	n/a
NHP(H)	○	★	●	○
NH(H)	○	★	○	○
FCHP(H)	○	○	●	○
BMCHP(H)	○	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	82.5%	Nat'l Mcaid Mean:	74.1%	MassHealth Weighted Mean:	83.3%
Nat'l Mcaid 75th Pctile:	79.5%	MA Commercial Mean:	86.0%	MassHealth Median:	82.5%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	345	13,972	411	83.9%	80.3%	87.6%
NHP	(H)	330	1,664	411	80.3%	76.3%	84.3%
NH	(H)	342	1,649	411	83.2%	79.5%	86.9%
FCHP	(H)	177	248	225	78.7%	73.1%	84.2%
BMCHP	(H)	339	3,819	411	82.5%	78.7%	86.3%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	329	1,392	411	80.0%	76.1%	84.0%
NH	(H)	334	1,290	411	81.3%	77.4%	85.2%
FCHP	(H)	130	170	167	77.8%	71.2%	84.4%
BMCHP	(H)	320	3,210	411	77.9%	73.7%	82.0%

* PCCP did not collect or report the Comprehensive Diabetes Care measure for HEDIS 2007.

Statistical Summary — LDL-C Control (<100 mg/dL)

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) *	○	○	●	n/a
NHP(H)	●	○	●	○
NH(H)	●	○	●	○
FCHP(H)	○	★	○	○
BMCHP(H)	●	○	●	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	44.7%	Nat'l Mcaid Mean:	33.8%	MassHealth Weighted Mean:	37.3%
Nat'l Mcaid 75th Pctile:	40.6%	MA Commercial Mean:	44.9%	MassHealth Median:	35.8%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	158	13,972	411	38.4%	33.6%	43.3%
NHP	(H)	139	1,664	411	33.8%	29.1%	38.5%
NH	(H)	138	1,649	411	33.6%	28.9%	38.3%
FCHP	(H)	99	248	225	44.0%	37.3%	50.7%
BMCHP	(H)	147	3,819	411	35.8%	31.0%	40.5%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	144	1,392	411	35.0%	30.3%	39.8%
NH	(H)	152	1,290	411	37.0%	32.2%	41.8%
FCHP	(H)	59	170	167	35.3%	27.8%	42.9%
BMCHP	(H)	145	3,210	411	35.3%	30.5%	40.0%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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

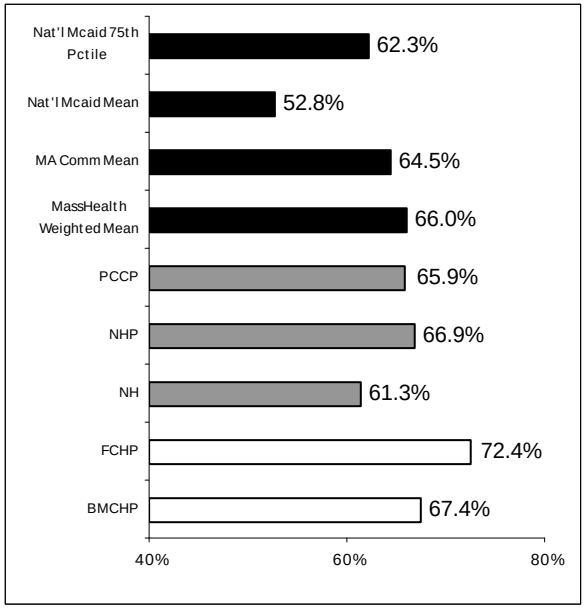
(H) = Measure was collected using hybrid method
Note: The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant 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, 2007.

Comprehensive Diabetes Care

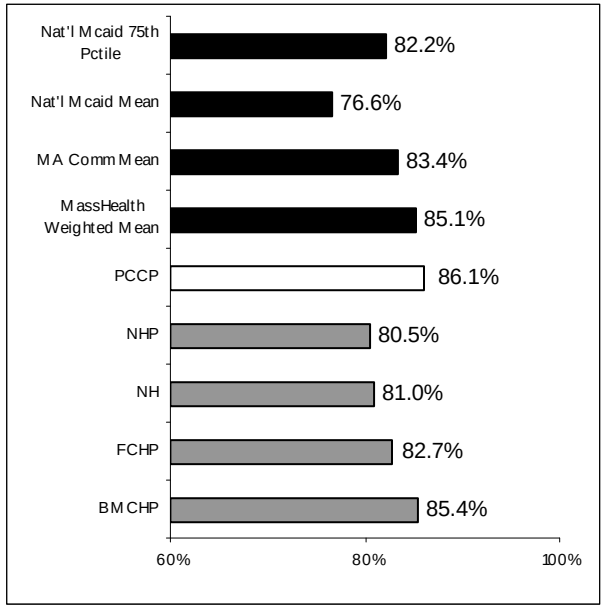
Eye Exams

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) who had eye exams during 2008.



Medical Attention for Nephropathy

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) who had a nephropathy screening test or evidence of nephropathy during 2008.



Understanding the Results

Sixty-six percent (66.0%) of MassHealth members 18 to 75 years of age with diabetes (type 1 or type 2) had eye exams during 2008. The individual plan rates ranged from 61.3% to 72.4%. Two plans (FCHP and BMCHP) had rates that were significantly above the national Medicaid 75th percentile rate. The other three plans (PCC Plan, NHP, and NH) had rates that were not significantly different from the Medicaid rate. All four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different from their 2007 rates. The PCC Plan did not report this measure in 2007.

Eighty-five percent (85.1%) of MassHealth members 18 to 75 years of age with diabetes (type 1 or type 2) had either a nephropathy screening test or showed evidence of nephropathy during 2008. Plan specific rates ranged from 80.5% to 86.1%. One plan (PCC Plan) had a rate that was significantly above the national Medicaid 75th percentile rate while the other four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different than the Medicaid rate. All four plans (NHP, NH, FCHP, and BMCHP) that reported data in 2007 or 2008 had rates that were not significantly different from their prior year rates. The PCC Plan did not report data this measure in 2007.

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2006)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile

* This measure's age range is 18-75. Although the MassHealth managed care program generally serves members under the age of 65, members 65 and older occasionally appear in the denominator of a plan's HEDIS rate (see page 13 for more information). MassHealth members 65 and older were included in the eligible population for this measure if the member met all eligible population criteria, including enrollment criteria.

Comprehensive Diabetes Care

Statistical Summary — Eye Exams

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) **	○	★	○	n/a
NHP(H)	○	★	○	○
NH(H)	○	★	○	○
FCHP(H) *	★	★	★	○
BMCHP(H)	★	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	70.8%	Nat'l Mcaid Mean:	52.8%	MassHealth Weighted Mean:	66.0%
Nat'l Mcaid 75th Pctile:	62.3%	MA Commercial Mean:	64.5%	MassHealth Median:	66.9%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	271	13,972	411	65.9%	61.2%	70.6%
NHP	(H)	275	1,664	411	66.9%	62.2%	71.6%
NH	(H)	252	1,649	411	61.3%	56.5%	66.1%
FCHP*	(H)	134	229	185	72.4%	65.7%	79.1%
BMCHP	(H)	277	3,819	411	67.4%	62.7%	72.1%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP**	.	.	.	.	.	.	.
NHP	(H)	289	1392	411	70.3%	65.8%	74.9%
NH	(H)	258	1290	411	62.8%	58.0%	67.6%
FCHP	(H)	113	170	167	67.7%	60.3%	75.1%
BMCHP	(H)	307	3210	411	74.7%	70.4%	79.0%

* FCHP data on eye exams is from 2008.

* * PCCP did not collect or report the Comprehensive Diabetes Care measure for HEDIS

Statistical Summary — Medical Attention for Nephropathy

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) **	★	★	○	n/a
NHP(H)	○	○	○	○
NH(H)	○	★	○	○
FCHP(H)	○	★	○	○
BMCHP(H)	○	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	85.4%	Nat'l Mcaid Mean:	76.6%	MassHealth Weighted Mean:	85.1%
Nat'l Mcaid 75th Pctile:	82.2%	MA Commercial Mean:	83.4%	MassHealth Median:	82.7%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	354	13,972	411	86.1%	82.7%	89.6%
NHP	(H)	331	1,664	411	80.5%	76.6%	84.5%
NH	(H)	333	1,649	411	81.0%	77.1%	84.9%
FCHP	(H)	186	248	225	82.7%	77.5%	87.8%
BMCHP	(H)	351	3,819	411	85.4%	81.9%	88.9%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	342	1392	411	83.2%	79.5%	86.9%
NH	(H)	322	1290	411	78.3%	74.2%	82.4%
FCHP	(H)	128	170	167	76.6%	69.9%	83.4%
BMCHP	(H)	344	3210	411	83.7%	80.0%	87.4%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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

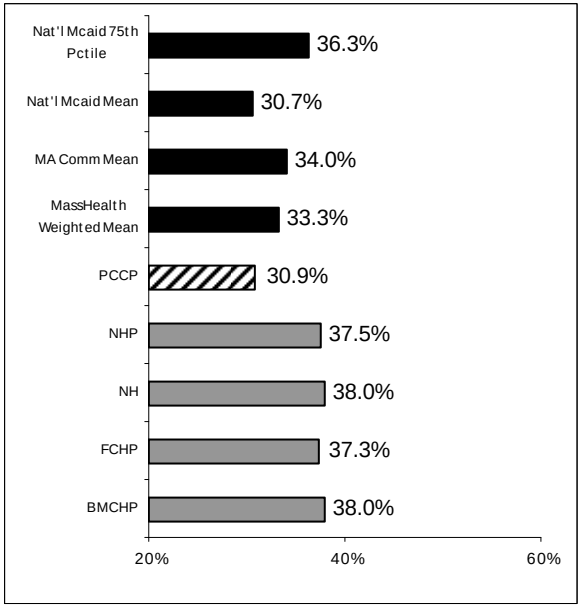
(H) = Measure was collected using hybrid method
Note: The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant 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, 2009.

Comprehensive Diabetes Care

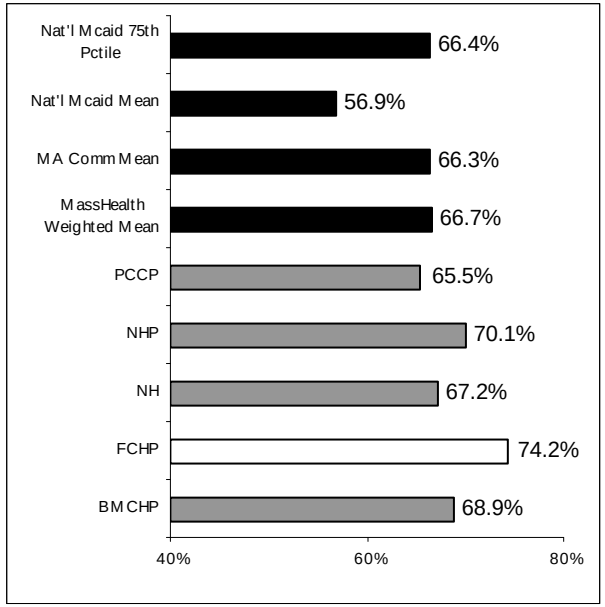
Blood Pressure Control (<130/80)

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) whose most recent blood pressure level (taken during 2008) was <130/80.



Blood Pressure Control (<140/90)

The percentage of members 18-75* years of age with diabetes (type 1 or type 2) whose most recent blood pressure level (taken during 2008) was <140/90.



Understanding the Results

Thirty-three percent (33.3%) of MassHealth members 18 to 75 years of age with diabetes (type 1 or type 2) had blood pressure control of <130/80 on their most recent measurement in 2008. The individual plan rates ranged from 30.9% to 38.0%. Four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different than the national Medicaid 75th percentile rate. One plan (PCC Plan) had a rate that was significantly below the Medicaid rate. All four plans (NHP, NH, FCHP, and BMCHP) had rates that were not significantly different from their 2007 rates. The PCC Plan did not report this measure in 2007.

Sixty-seven percent (66.7%) of MassHealth members 18 to 75 years of age with diabetes (type 1 or type 2) had blood pressure control of <140/90 on their most recent measurement in 2008. Plan specific rates ranged from 65.5% to 74.2%. Four plans (PCC Plan NHP, NH, and BMCHP) had rates that were not significantly different than the national Medicaid 75th percentile rate. One plan (FCHP) had a rate that was significantly above the Medicaid rate. All four plans that reported data in 2007 (NHP, NH, FCHP, and BMCHP) had 2009 rates that were not statistically different. The PCC Plan did not report this measure in 2007.

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile
- The 2009 national Medicaid 75th percentile for this measure is not available.

* This measure's age range is 18-75. Although the MassHealth managed care program generally serves members under the age of 65, members 65 and older occasionally appear in the denominator of a plan's HEDIS rate (see page 13 for more information). MassHealth members 65 and older were included in the eligible population for this measure if the member met all eligible population criteria, including enrollment criteria.

Comprehensive Diabetes Care

Statistical Summary — Blood Pressure Control (<130/80)

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) *	●	○	○	n/a
NHP(H)	○	★	○	○
NH(H)	○	★	○	○
FCHP(H)	○	★	○	○
BMCHP(H)	○	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	41.9%	Nat'l Mcaid Mean:	30.7%	MassHealth Weighted Mean:	33.3%
Nat'l Mcaid 75th Pctile:	36.3%	MA Commercial Mean:	34.0%	MassHealth Median:	37.5%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	127	13,972	411	30.9%	26.3%	35.5%
NHP	(H)	154	1,664	411	37.5%	32.7%	42.3%
NH	(H)	156	1,649	411	38.0%	33.1%	42.8%
FCHP	(H)	84	248	225	37.3%	30.8%	43.9%
BMCHP	(H)	156	3,819	411	38.0%	33.1%	42.8%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	142	1392	411	34.5%	29.8%	39.3%
NH	(H)	157	1290	411	38.2%	33.4%	43.0%
FCHP	(H)	76	170	167	45.5%	37.7%	53.4%
BMCHP	(H)	141	3210	411	34.3%	29.6%	39.0%

* PCCP did not collect or report the Comprehensive Diabetes Care measure for HEDIS 2007.

Statistical Summary — Blood Pressure Control (<140/90)

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H) *	○	★	○	n/a
NHP(H)	○	★	○	○
NH(H)	○	★	○	○
FCHP(H)	★	★	★	○
BMCHP(H)	○	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	71.2%	Nat'l Mcaid Mean:	56.9%	MassHealth Weighted Mean:	66.7%
Nat'l Mcaid 75th Pctile:	66.4%	MA Commercial Mean:	66.3%	MassHealth Median:	68.9%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	269	13,972	411	65.5%	60.7%	70.2%
NHP	(H)	288	1,664	411	70.1%	65.5%	74.6%
NH	(H)	276	1,649	411	67.2%	62.5%	71.8%
FCHP	(H)	167	248	225	74.2%	68.3%	80.2%
BMCHP	(H)	283	3,819	411	68.9%	64.3%	73.5%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP*	.	.	.	.	.	.	.
NHP	(H)	281	1392	411	68.4%	63.8%	73.0%
NH	(H)	275	1290	411	66.9%	62.2%	71.6%
FCHP	(H)	130	170	167	77.8%	71.2%	84.4%
BMCHP	(H)	279	3210	411	67.9%	63.2%	72.5%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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, 2009.

Understanding the Results (continued)

Diabetes is one of the most difficult chronic diseases to manage, because it presents with an overwhelming array of behavioral challenges and because optimal control requires a large amount of patient initiative. Currently experts feel that 95% of treatment for diabetes is carried out by the patient or their family members. An important aspect of treatment for diabetes is communication between the physician and the patient.[18]

Studies have shown that enhancing patient-provider communication has resulted in improved health outcomes such as:

- Greater patient satisfaction,
- Adherence to treatment plans,
- Higher self-reported health status,
- Better emotional health,
- Greater symptom relief, and
- Physiological measures of disease control.

A large survey study determined that a multifaceted disease management program that incorporates a focus on patient self-management was promising. The findings illustrated that physician efforts at providing information to patients about their illness and treatment plans were the main determinant of how well patients self-managed their diabetes. The results controlled for age and health status, which were both found not to influence a patient's self-management.[19]

The American Diabetes Association's 2009 version of Standards of Medical Care in Diabetes recommends strategies for improving diabetes care, several of which target changes at the nexus of care between physicians and patients and include the following:

- A management plan should be formulated as an individual therapeutic alliance among the patient, family, physician, and other members of the health care team.
- Ongoing education and development of problem-solving skills must be a constant aspect of the disease management strategy.
- The goals of the treatment plan established by the patient and physician must be reasonable.
- Diabetes self-management education (DSME) is an integral component of patient care.[20]

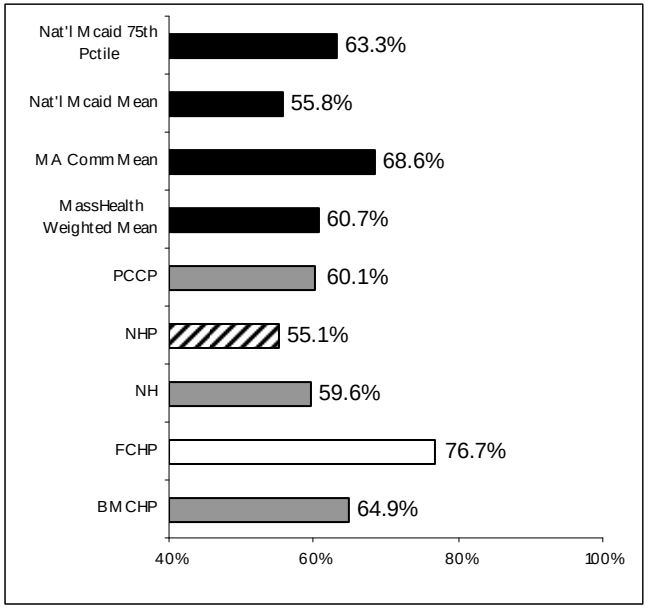
Studies have found that keeping A1c at normal levels in people with diabetes can greatly reduce cardiovascular disease and other comorbidities associated with diabetes. However, another study has found that despite recent trends toward improved glycemic control, about 40% of U.S. diabetics fail to maintain good A1c control (<7%). Continued development of new pharmacological options is needed, in combination with efforts intended to support patient self-management.[21]

Controlling High Blood Pressure

Nearly 30% of the U.S. population has high blood pressure (hypertension), and of this group, only about one-third have their blood pressure in good control. However, rates of control and awareness of the condition are increasing.[22] The HEDIS Controlling High Blood Pressure measure defines blood pressure control as <140/90, a less stringent requirement than some current clinical guidelines such as those put out by the National Heart, Lung, and Blood Institute, which defines a normal blood pressure to be less than 120/80, prehypertension as 120-139/80-89, and high blood pressure as 140/90 or higher.[23] Lifestyle modifications such as increased exercise, weight loss, tobacco cessation, reduced alcohol intake, and reduced salt intake can help individuals control their blood pressure. In addition, antihypertensive pharmacotherapy is effective in controlling blood pressure and has been associated with reduced incidence of stroke, heart attack, and heart failure.[24]

Controlling High Blood Pressure

The percentage of members 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90) during the measurement year.



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile
- The 2009 national Medicaid 75th percentile for this measure is not available.

Understanding the Results

Sixty-one percent (60.7%) of MassHealth members 18 to 85 years of age had a diagnosis of hypertension and also had adequately controlled blood pressure (<140/90) during 2008. Individual plan rates ranged from 55.1% to 76.7%. One plan (FCHP) had a rate that was significantly above the national Medicaid 75th percentile rate. Three plans (PCC Plan, NH, and BMCHP) had rates that were not significantly different while one plan (NHP) had a rate that was significantly below the Medicaid rate. One plan (BMCHP) had a rate that was significantly above its 2007 rate, and the other four plans (PCC Plan, NHP, NH, and FCHP) had rates that were not significantly different than their 2007 rates.

The definition of blood pressure control currently used for the HEDIS Controlling High Blood Pressure measure is <140/90, a criteria that is less stringent than other clinical guidelines. The HEDIS measure's definition of the eligible population includes all members who meet the diagnosis criteria for hypertension, including higher risk populations such as members with diabetes (the one exception is that the measure does exclude members with a diagnosis of end stage renal disease). Although a control threshold of <140/90 may be appropriate for certain populations, it may not be an appropriate threshold for more complicated members, such as those with comorbid diabetes or heart disease, who should have their blood pressure controlled to at least <130/80.[25]

Adherence to pharmacological treatment plans for high blood pressure is associated with improved hypertension control.[26] A number of patient factors may be related to adherence, such as the severity of the hypertension, number of comorbidities, and side effects of treatment.

(Continued on page 38)

Controlling High Blood Pressure

Statistical Summary

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(H)	○	○	●	○
NHP(H)	●	○	●	○
NH(H)	○	○	●	○
FCHP(H)	★	★	★	○
BMCHP(H)	○	★	○	★

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	66.6%	Nat'l Mcaid Mean:	55.8%	MassHealth Weighted Mean:	60.7%
Nat'l Mcaid 75th Pctile:	63.3%	MA Commercial Mean:	68.6%	MassHealth Median:	60.1%

MassHealth Plan Rates

2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	247	14,385	411	60.1%	55.2%	65.0%
NHP	(H)	216	2,491	392	55.1%	50.1%	60.2%
NH	(H)	245	1,724	411	59.6%	54.7%	64.5%
FCHP	(H)	207	276	270	76.7%	71.4%	81.9%
BMCHP	(H)	264	4,934	407	64.9%	60.1%	69.6%

2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	218	11,733	411	53.0%	48.1%	58.0%
NHP	(H)	253	1,845	411	61.6%	56.7%	66.4%
NH	(H)	213	1,367	378	56.3%	51.2%	61.5%
FCHP	(H)	136	211	198	68.7%	62.0%	75.4%
BMCHP	(H)	223	3,894	411	54.3%	49.3%	59.2%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 rate is significantly below the comparison rate.

Num indicates Numerator
Den indicates Denominator
Elig indicates the Eligible Population
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, 2009.

Controlling High Blood Pressure

Understanding the Results (continued)

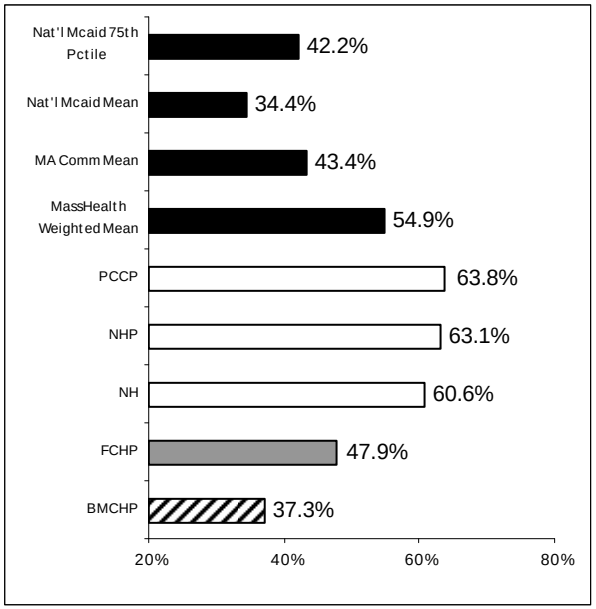
Strategies to improve patient adherence to hypertension treatment include designing treatment plans to reflect patient preferences and lifestyles, identifying specific blood pressure targets, instructing patients to perform self-management, and discussing strategies for managing side effects.[27]

Follow-up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication

ADHD is one of the most common neurobehavioral disorders of childhood. It is usually first diagnosed in childhood and often lasts into adulthood.[28] A 2007 study found that the prevalence of ADHD in a national population-based sample of U.S. children aged 8 to 15 years old assessed with a DSM-IV-based diagnostic instrument was 8.7%, or approximately 2.4 million children.[29] This study also revealed that ADHD is more common among poorer children, with 11% of children in the poorest quintile meeting DSM-IV criteria for ADHD. More troubling is that these children were the least likely to receive consistent ADHD medication treatment compared with higher income children. Given the high prevalence of ADHD among low-income children, providers serving Medicaid populations are likely to see these children in their practices.

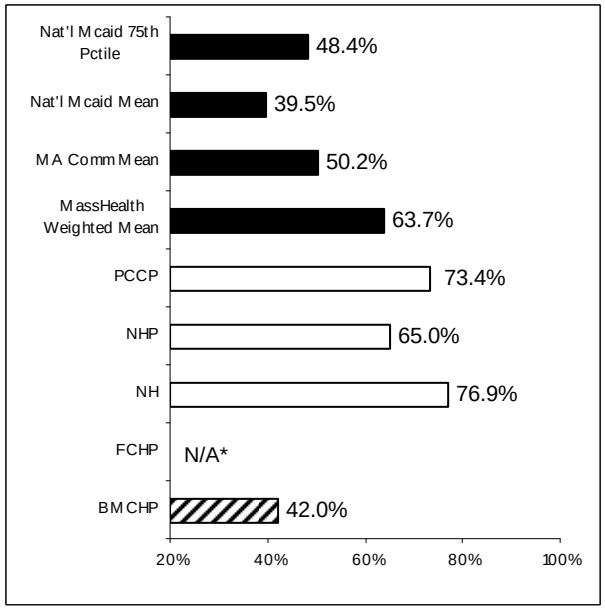
Initiation Phase

The percentage of members 6-12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with practitioner with prescribing authority during the 30-day Initiation Phase.



Continuation & Maintenance Phase

The percentage of members 6-12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication, who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least 2 follow-up visits with a practitioner within 270 days after the Initiation Phase ended.



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile
- The 2009 national Medicaid 75th percentile for this measure is not available.

Understanding the Results

Fifty-five percent (54.9%) of MassHealth members 6-12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication had one follow-up visit with a practitioner with prescribing authority during the 30 day Initiation Phase. Individual plan rates range from 37.3% to 63.8%. Three plans (PCC Plan, NHP, and NH) had rates that were significantly above the national Medicaid 75th percentile. One plan (FCHP) has a rate that was not significantly different that the Medicaid rate while one plan (BMCHP) had a rate that was significantly below the Medicaid rate. All five plans had rates that were not significantly different than their 2007 rate.

Sixty-four percent (63.7%) of MassHealth members 6-12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days had at least 2 follow-up visits with a practitioner within 270 days after the Initiation Phase ended. Plan specific rates ranged from 42.0% to 76.9%. Three plans (PCC Plan, NHP, and NH) had rates that were significantly above the national Medicaid 75th percentile rate. One plan (BMCHP) had a rate that was significantly below the Medicaid rate. Four plans (PCC Plan, NHP, NH, and BMCHP) had rates that were not significantly different than their 2007 rates.

(Continued on page 41)

Follow-up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication

Statistical Summary — Initiation

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(A)	★	★	★	○
NHP(A)	★	★	★	○
NH(A)	★	★	★	○
FCHP(A)	○	○	○	○
BMCHP(A)	●	○	●	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	46.8%	Nat'l Mcaid Mean:	34.4%	MassHealth Weighted Mean:	54.9%
Nat'l Mcaid 75th Pctile:	42.2%	MA Commercial Mean:	43.4%	MassHealth Median:	60.6%

MassHealth Plan Rates

2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	846	1,325	63.8%	61.2%	66.5%
NHP	(A)	358	567	63.1%	59.1%	67.2%
NH	(A)	319	526	60.6%	56.4%	64.9%
FCHP	(A)	23	48	47.9%	32.7%	63.1%
BMCHP	(A)	405	1,087	37.3%	34.3%	40.2%

2007		Num	Den	Rate	LCL	UCL
PCCP	(A)	912	1433	63.6%	61.1%	66.2%
NHP	(A)	333	549	60.7%	56.5%	64.8%
NH	(A)	282	445	63.4%	58.8%	68.0%
FCHP	(A)	36	53	67.9%	54.4%	81.4%
BMCHP	(A)	317	996	31.8%	28.9%	34.8%

Statistical Summary — Continuation and Maintenance

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(A)	★	★	★	○
NHP(A)	★	★	★	○
NH(A)	★	★	★	○
FCHP(A)	n/a	n/a	n/a	n/a
BMCHP(A)	●	○	●	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	53.8%	Nat'l Mcaid Mean:	39.5%	MassHealth Weighted Mean:	63.7%
Nat'l Mcaid 75th Pctile:	48.4%	MA Commercial Mean:	50.2%	MassHealth Median:	69.2%

MassHealth Plan Rates

2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	325	443	73.4%	69.1%	77.6%
NHP	(A)	78	120	65.0%	56.0%	74.0%
NH	(A)	100	130	76.9%	69.3%	84.6%
FCHP	(A)	5	5	.	.	.
BMCHP	(A)	119	283	42.0%	36.1%	48.0%

2007		Num	Den	Rate	LCL	UCL
PCCP	(A)	334	445	75.1%	70.9%	79.2%
NHP	(A)	60	95	63.2%	52.9%	73.4%
NH	(A)	70	99	70.7%	61.2%	80.2%
FCHP	(A)	2	3	.	.	.
BMCHP	(A)	99	276	35.9%	30.0%	41.7%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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, 2009.

Understanding the Results (continued)

To assist primary care clinicians with the appropriate treatment of children with ADHD, the American Academy of Pediatrics developed clinical practice guidelines. Key aspects of these recommended guidelines include:

- Treat ADHD as a chronic condition;
- Recommend stimulant medication and/or behavior therapy;
- Evaluate original diagnosis, adherence to treatment plan, and presence of coexisting conditions;
- Follow up with child and family periodically to assess effects of treatment and adverse reactions to medication.[30]

Adherence to these guidelines among pediatricians and family physicians was examined in a 2004 study and revealed that only 53% reported following the guideline regarding periodic follow-up to assess effects of treatment and adverse reactions. The study also found that family physicians (67.5%) reported significantly more frequent follow up compared with pediatricians (41.6%).[31]

Relatively few studies have examined factors associated with appropriate follow-up care for children prescribed ADHD medications. One study examined factors associated with follow-up care for children identified with ADHD, whether or not they were prescribed medication, and found that:

- Follow up visits with primary care providers were more common with those physicians that completed a fellowship that included mental health training;
- African American families were more likely to see a specialist after their child was diagnosed with ADHD, especially if their child was prescribed medication;
- Children receiving Medicaid were more likely to see specialists after being diagnosed with ADHD.[32]

The finding relating to Medicaid coverage suggests that MassHealth plans have an opportunity to provide better care in this area than commercial plans. This in fact occurred for three of the five MassHealth plans, whose rates were significantly higher than the Massachusetts commercial mean for both the initiation and continuation phases of the measure.

A 2005 survey of families of 856 children with ADHD asked about the reasons that they postponed or discontinued the use of ADHD treatment for their child.[33] The most common reasons included:

- Fear of medication side effects;
- Lack of information about ADHD;
- Distrust in the brief assessment process that their child received for diagnosis;
- Development of side effects such as insomnia or loss of appetite on medications.

Building on these findings, some ways to improve rates of follow up care for children prescribed ADHD medication may include:

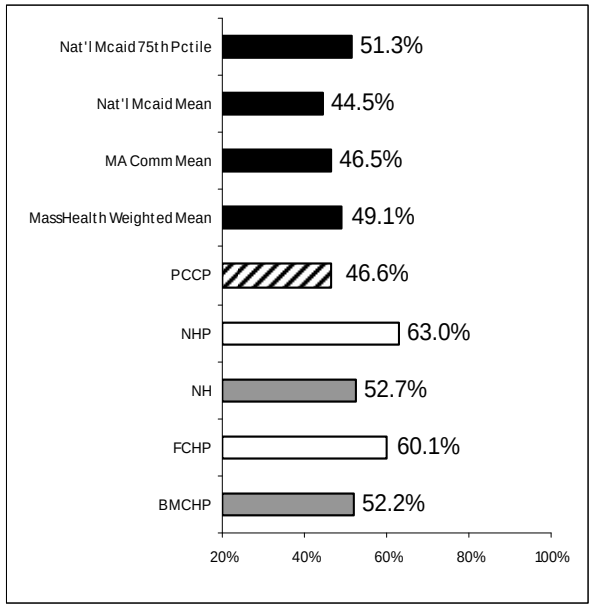
- Provide education, both verbal and written, to parents or caregivers on ADHD, treatment options, and importance of follow up;
- Address concerns of parents and children on ADHD medications including their side effects, and what to do if these arise;
- Provide training on the AAP ADHD clinical guidelines to pediatricians and family physicians.

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Substance abuse continues to be a serious problem in the U.S. In 2008, an estimated 22.2 million Americans age 12 and older (8.9% of the population) suffered from alcohol or other drug abuse.[34] Although the evidence is growing that substance abuse treatment programs can be effective, actively engaging in alcohol and other drug dependence treatment is critical for an individual's successful recovery from substance abuse conditions. Specifically, research shows that individuals that complete treatment or stay in treatment for a longer period of time have better outcomes than those who leave treatment prematurely.[35] Fully engaging in therapy after initiation is key to prevention.

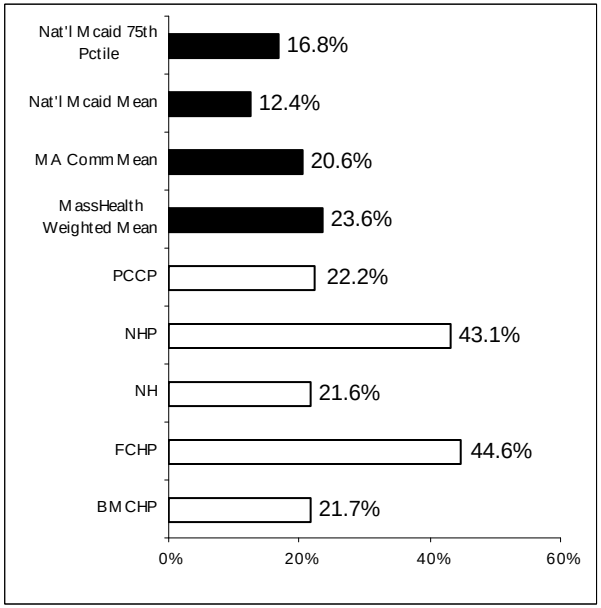
Initiation of Treatment

The percentage of members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of the diagnosis.



Engagement of Treatment

The percentage of members who initiated treatment and who had two or more additional services with an AOD diagnosis within 30 days of the initiation visit.



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2009)
- Rate is *significantly above* the 2009 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2009 national Medicaid 75th percentile
- Rate is *significantly below* the 2009 national Medicaid 75th percentile

Understanding the Results

Forty-nine percent (49.1%) of MassHealth members had treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis. The individual plan rates ranged from 46.6% to 63.0%. Two plans (NHP and FCHP) had rates that were significantly above the national Medicaid 75th percentile rate, two plans (NH and BMCHP) had rates that were not significantly different, and one plan (PCC Plan) had a rate that was significantly below the Medicaid rate. One plan (NHP) had a rate that was significantly above its 2007 rate, three plans (NH, FCHP, and PCC Plan) had rates that were not significantly different, while one plan (BMCHP) had a rate that was significantly below its 2007 rate.

Twenty-four percent (23.6%) of MassHealth members initiated treatment and had two or more additional services with an AOD diagnosis within 30 days of the initiation visit. Plan specific rates ranged from 22.2% to 44.6%. All five plans had rates that were significantly above the national Medicaid 75th percentile rate. Three plans (NH, FCHP, and PCC Plan) had rates that were significantly above their 2007 rates, while the other two (NHP and BMCHP) had rates that were not significantly different than their 2007 rates.

(Continued on page 44)

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Statistical Summary — Initiation Rate (All Ages)

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(A)	●	★	○	○
NHP(A)	★	★	★	★
NH(A)	○	★	★	○
FCHP(A)	★	★	★	○
BMCHP(A)	○	★	★	●

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	57.3%	Nat'l Mcaid Mean:	44.5%	MassHealth Weighted Mean:	49.1%
Nat'l Mcaid 75th Pctile:	51.3%	MA Commercial Mean:	46.5%	MassHealth Median:	52.7%

MassHealth Plan Rates

2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	7,171	15,402	46.6%	45.8%	47.3%
NHP	(A)	899	1,428	63.0%	60.4%	65.5%
NH	(A)	826	1,566	52.7%	50.2%	55.3%
FCHP	(A)	89	148	60.1%	51.9%	68.4%
BMCHP	(A)	1,878	3,595	52.2%	50.6%	53.9%

2007		Num	Den	Rate	LCL	UCL
PCCP	(A)	4,278	9,060	47.2%	46.2%	48.3%
NHP	(A)	395	820	48.2%	44.7%	51.7%
NH	(A)	619	1,286	48.1%	45.4%	50.9%
FCHP	(A)	100	188	53.2%	45.8%	60.6%
BMCHP	(A)	1,670	2,946	56.7%	54.9%	58.5%

Statistical Summary — Engagement Rate (All Ages)

Comparison to 2009 Rates:	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2007 Rate
PCCP(A)	★	★	★	★
NHP(A)	★	★	★	○
NH(A)	★	★	○	★
FCHP(A)	★	★	★	★
BMCHP(A)	★	★	○	○

2009 Comparison Rates

Nat'l Mcaid 90th Pctile:	21.7%	Nat'l Mcaid Mean:	12.4%	MassHealth Weighted Mean:	23.6%
Nat'l Mcaid 75th Pctile:	16.8%	MA Commercial Mean:	20.6%	MassHealth Median:	22.2%

MassHealth Plan Rates

2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	3,417	15,402	22.2%	21.5%	22.8%
NHP	(A)	615	1,428	43.1%	40.5%	45.7%
NH	(A)	339	1,566	21.6%	19.6%	23.7%
FCHP	(A)	66	148	44.6%	36.2%	52.9%
BMCHP	(A)	780	3,595	21.7%	20.3%	23.1%

2007		Num	Den	Rate	LCL	UCL
PCCP	(A)	1,738	9,060	19.2%	18.4%	20.0%
NHP	(A)	324	820	39.5%	36.1%	42.9%
NH	(A)	191	1,286	14.9%	12.9%	16.8%
FCHP	(A)	44	188	23.4%	17.1%	29.7%
BMCHP	(A)	647	2,946	22.0%	20.5%	23.5%

Legend:
★ 2009 rate is significantly above the comparison rate.
○ 2009 rate is not significantly different from the comparison rate.
● 2009 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, 2009.

Understanding the Results (continued)

Several individual factors are associated with lower rates of initiation and engagement in substance abuse treatment. These include:[36]

- Older age
- Greater severity of alcohol or drug abuse
- Co-morbid psychiatric severity
- Prior treatment history

In addition to these personal factors, several characteristics of substance abuse treatment programs are associated with client engagement in treatment.

Engagement in treatment may be higher in programs with the following factors:[37]

- Smaller provider caseloads
- JCAHO or CARF accredited programs
- Staff have more confidence in their skills
- Staff report a more supportive work climate, and
- Staff are engaged in professional community practices (e.g., peer collaboration, use of reflective dialogue, focus on quality improvement, and collective responsibility).

Organizational climate or culture can also have an impact on client engagement in treatment. Specifically, consensus among staff in residential substance abuse treatment programs is a significant predictor of client treatment engagement.[38] Consensus is defined in this study as agreement between staff on the goals and methods of treatment. Additionally, agreement between staff and clients on goals and methods of treatment is a significant predictor of successful engagement.

Plans should consider whether program and organizational factors are facilitating or hindering successful treatment engagement by their members with identified substance abuse issues. Factors such as positive working relationships among staff and agreement on treatment approaches and philosophies appear to make a difference in how likely clients are to engage in substance abuse treatment. Educating program directors on the impact of these structural factors on client engagement may lead to improvements in the future.

Use of Services

Identification of Alcohol and Other Drug Services

The 2008 National Survey on Drug Use and Health estimated that only 10% of persons aged 12 and above who needed specialty treatment for substance abuse actually received such services.[39] Underutilization of substance abuse services is therefore an area of concern. The HEDIS Identification of Alcohol and Other Drug Services measure provides basic information on the utilization of substance abuse services by members who were identified as needing these services. The data shown here do not provide any information on the quality of substance abuse services utilized, nor do they indicate whether the amount of utilization is appropriate.

Identification of Alcohol and Other Drug Services

The number and percentage of members with an alcohol and other drug (AOD) claim who received chemical dependency services during 2008. Chemical dependency services are broken down by inpatient, intermediate, ambulatory, and any service. (Intermediate services include intensive outpatient and partial hospitalization programs. Inpatient services include detoxification, at either a hospital or a treatment facility.) 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, 18-24, 25-34, 35-64, and 65+) appear in Appendix G.

	Member Months	Inpatient		Intermediate		Ambulatory		Any Service	
		N	%	N	%	N	%	N	%
PCCP	3,458,444	3,399	1.2%	10,867	3.8%	31,352	10.9%	34,165	11.9%
NHP	1,499,726	791	0.6%	419	0.3%	2,743	2.2%	3,068	2.5%
NH	1,143,567	1,125	1.2%	306	0.3%	3,335	3.5%	3,714	3.9%
FCHP	136,894	126	1.1%	34	0.3%	432	3.8%	474	4.2%
BMCHP	2,018,254	2,721	1.6%	880	0.5%	7,048	4.2%	7,974	4.7%
2009 National Medicaid 75th Percentile			1.3%		0.3%		3.6%		4.1%

The source of the National Medicaid 75th Percentile is Quality Compass, 2009.

Appendix A:
MassHealth Regions and Service Areas

MassHealth Service Areas and Regions

Region	Service Areas*
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:

Frequency of Ongoing Prenatal Care
Percent of All Expected Visit Rates

Frequency of Ongoing Prenatal Care - Percentage of All Expected Visit Rates

<21%							
2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	41	4,752	411	10.0%	7.0%	13.0%
NHP	(H)	32	3,501	405	7.9%	5.2%	10.7%
NH	(H)	51	2,606	405	12.6%	9.2%	15.9%
FCHP	(H)	89	296	294	30.3%	24.9%	35.7%
BMCHP	(H)	14	4,687	411	3.4%	1.5%	5.3%

21%-40%							
2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	38	4,752	411	9.2%	6.3%	12.2%
NHP	(H)	13	3,501	405	3.2%	1.4%	5.1%
NH	(H)	34	2,606	405	8.4%	5.6%	11.2%
FCHP	(H)	3	296	294	1.0%	0.0%	2.3%
BMCHP	(H)	18	4,687	411	4.4%	2.3%	6.5%

41%-60%							
2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	47	4,752	411	11.4%	8.2%	14.6%
NHP	(H)	20	3,501	405	4.9%	2.7%	7.2%
NH	(H)	24	2,606	405	5.9%	3.5%	8.3%
FCHP	(H)	14	296	294	4.8%	2.2%	7.4%
BMCHP	(H)	23	4,687	411	5.6%	3.3%	7.9%

61%-80%							
2009		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	100	4,752	411	24.3%	20.1%	28.6%
NHP	(H)	53	3,501	405	13.1%	9.7%	16.5%
NH	(H)	52	2,606	405	12.8%	9.5%	16.2%
FCHP	(H)	51	296	294	17.3%	12.8%	21.8%
BMCHP	(H)	64	4,687	411	15.6%	11.9%	19.2%

Appendix C:
PCC Plan Breast Cancer Screening Rates for Members with Essential Coverage

Breast Cancer Screening - PCC Plan Essential Population

Essential Population Only (Compared with Non-Essential)						
2009		**Num**	**Den**	**Rate**	**LCL**	**UCL**
Essential	(A)	1,875	3,019	62.1%	60.4%	63.9%
Non-Essential	(A)	16,289	25,448	64.0%	63.4%	64.6%

Appendix D:
PCC Plan Cervical Cancer Screening Rates for Members with Essential Coverage

Cervical Cancer Screening - PCC Plan Essential Population

Essential Population Only (Compared with Total)						
2009		**Num**	**Den**	**Rate**	**LCL**	**UCL**
Essential	(A)	1,420	2,326	61.0%	59.0%	63.1%
Non-Essential	(A)	26,175	35,761	73.2%	72.7%	73.7%

Appendix E:

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment (Age–Stratified Rates, All Plans)

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment

13-17 Initiation						
2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	112	374	29.9%	25.2%	34.7%
NHP	(A)	48	88	54.5%	43.6%	65.5%
NH	(A)	57	132	43.2%	34.4%	52.0%
FCHP	(A)	2	10	.	.	.
BMCHP	(A)	93	257	36.2%	30.1%	42.3%

13-17 Engagement						
2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	55	374	14.7%	11.0%	18.4%
NHP	(A)	33	88	37.5%	26.8%	48.2%
NH	(A)	27	132	20.5%	13.2%	27.7%
FCHP	(A)	2	10	.	.	.
BMCHP	(A)	51	257	19.8%	14.8%	24.9%

18+ Initiation						
2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	7,059	15,028	47.0%	46.2%	47.8%
NHP	(A)	851	1,340	63.5%	60.9%	66.1%
NH	(A)	769	1,434	53.6%	51.0%	56.2%
FCHP	(A)	87	138	63.0%	54.6%	71.5%
BMCHP	(A)	1,785	3,338	53.5%	51.8%	55.2%

18+ Engagement						
2009		Num	Den	Rate	LCL	UCL
PCCP	(A)	3,362	15,028	22.4%	21.7%	23.0%
NHP	(A)	582	1,340	43.4%	40.7%	46.1%
NH	(A)	312	1,434	21.8%	19.6%	23.9%
FCHP	(A)	64	138	46.4%	37.7%	55.1%
BMCHP	(A)	729	3,338	21.8%	20.4%	23.3%

Appendix F:

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment: Age-Stratified Rates for PCC Plan Coverage Breakouts

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment (PCC Plan)

13-17 Initiation						
2009		Num	Den	Rate	LCL	UCL
Basic	(A)	-	-	-	-	-
Essential	(A)	-	-	-	-	-
NB/NE	(A)	112	374	29.9	25.2	34.7

13-17 Engagement						
2009		Num	Den	Rate	LCL	UCL
Basic	(A)	-	-	-	-	-
Essential	(A)	-	-	-	-	-
NB/NE	(A)	55	374	14.7	11.0	18.4

18+ Initiation						
2009		Num	Den	Rate	LCL	UCL
Basic	(A)	570	1,176	48.5	45.6	51.4
Essential	(A)	2,851	5,762	49.5	48.2	50.8
NB/NE	(A)	3,638	8,090	45.0	43.9	46.1

18+ Engagement						
2009		Num	Den	Rate	LCL	UCL
Basic	(A)	291	1,176	24.7	22.2	27.3
Essential	(A)	1,527	5,762	26.5	25.4	27.6
NB/NE	(A)	1,544	8,090	19.1	18.2	19.9

Total Initiation						
2009		Num	Den	Rate	LCL	UCL
Basic	(A)	570	1,176	48.5	45.6	51.4
Essential	(A)	2,851	5,762	49.5	48.2	50.8
NB/NE	(A)	3,750	8,464	44.3	43.2	45.4

Total Engagement						
2009		Num	Den	Rate	LCL	UCL
Basic	(A)	291	1,176	24.7	22.2	27.3
Essential	(A)	1,527	5,762	26.5	25.4	27.6
NB/NE	(A)	1,599	8,464	18.9	18.1	19.7

NB/NE = Non-Basic/Non-Essential

Appendix G:

Identification of Alcohol and Other Drug Services: Age and Gender Stratifications, All Plans

Identification of Alcohol and Other Drug Services - Percentage of Members Using Services

Ages 0-12

Male

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	460,777	1	0.0%	1	0.0%	38	0.1%	40	0.1%
NHP	358,797	0	0.0%	1	0.0%	8	0.0%	9	0.0%
NH	289,093	2	0.0%	0	0.0%	23	0.1%	24	0.1%
FCHP	28,451	1	0.0%	0	0.0%	0	0.0%	1	0.0%
BMCHP	497,187	7	0.0%	0	0.0%	53	0.1%	59	0.1%

Female

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	421,792	0	0.0%	4	0.0%	25	0.1%	29	0.1%
NHP	348,294	0	0.0%	0	0.0%	5	0.0%	5	0.0%
NH	281,370	0	0.0%	0	0.0%	17	0.1%	17	0.1%
FCHP	27,450	0	0.0%	0	0.0%	1	0.0%	1	0.0%
BMCHP	482,376	2	0.0%	0	0.0%	41	0.1%	43	0.1%

Ages 13-17

Male

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	195,656	29	0.2%	61	0.4%	408	2.5%	428	2.6%
NHP	109,745	13	0.1%	8	0.1%	68	0.7%	79	0.9%
NH	77,041	17	0.3%	6	0.1%	145	2.3%	154	2.4%
FCHP	9,151	1	0.1%	2	0.3%	21	2.8%	22	2.9%
BMCHP	140,754	37	0.3%	6	0.1%	269	2.3%	288	2.5%

Female

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	179,697	26	0.2%	48	0.3%	285	1.9%	314	2.1%
NHP	114,468	8	0.1%	4	0.0%	36	0.4%	44	0.5%
NH	74,582	15	0.2%	1	0.0%	80	1.3%	88	1.4%
FCHP	9,633	0	0.0%	0	0.0%	7	0.9%	7	0.9%
BMCHP	139,948	34	0.3%	3	0.0%	160	1.4%	179	1.5%

Identification of Alcohol and Other Drug Services - Percentage of Members Using Services

Ages 18-24

Male

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	184,510	288	1.9%	976	6.3%	2,322	15.1%	2,653	17.3%
NHP	38,937	41	1.3%	15	0.5%	120	3.7%	144	4.4%
NH	28,505	51	2.1%	12	0.5%	164	6.9%	186	7.8%
FCHP	4,351	7	1.9%	0	0.0%	19	5.2%	22	6.1%
BMCHP	50,332	126	3.0%	41	1.0%	326	7.8%	384	9.2%

Female

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	211,206	197	1.1%	696	4.0%	1,896	10.8%	2,045	11.6%
NHP	104,524	104	1.2%	51	0.6%	283	3.2%	318	3.7%
NH	79,630	139	2.1%	32	0.5%	371	5.6%	422	6.4%
FCHP	9,532	14	1.8%	1	0.1%	35	4.4%	41	5.2%
BMCHP	143,155	320	2.7%	102	0.9%	689	5.8%	816	6.8%

Ages 25-34

Male

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	208,715	579	3.3%	2,161	12.4%	5,111	29.4%	5,703	32.8%
NHP	26,044	87	4.0%	35	1.6%	260	12.0%	293	13.5%
NH	25,165	85	4.1%	22	1.0%	305	14.5%	339	16.2%
FCHP	4,563	7	1.8%	2	0.5%	44	11.6%	46	12.1%
BMCHP	41,305	200	5.8%	70	2.0%	537	15.6%	607	17.6%

Female

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	259,613	331	1.5%	1,140	5.3%	3,195	14.8%	3,384	15.6%
NHP	144,296	192	1.6%	120	1.0%	652	5.4%	712	5.9%
NH	98,679	216	2.6%	71	0.9%	617	7.5%	669	8.1%
FCHP	15,506	19	1.5%	7	0.5%	84	6.5%	89	6.9%
BMCHP	185,293	471	3.1%	199	1.3%	1,327	8.6%	1,466	9.5%

Identification of Alcohol and Other Drug Services - Percentage of Members Using Services

Ages 35-64

Male

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	615,497	1,185	2.3%	4,037	7.9%	11,491	22.4%	12,541	24.5%
NHP	74,912	160	2.6%	76	1.2%	529	8.5%	613	9.8%
NH	64,947	315	5.8%	65	1.2%	747	13.8%	860	15.9%
FCHP	10,036	35	4.2%	10	1.2%	98	11.7%	112	13.4%
BMCHP	108,587	780	8.6%	190	2.1%	1,671	18.5%	1,913	21.1%

Female

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	720,981	763	1.3%	1,743	2.9%	6,581	11.0%	7,028	11.7%
NHP	179,418	186	1.2%	109	0.7%	777	5.2%	846	5.7%
NH	124,535	285	2.7%	97	0.9%	866	8.3%	955	9.2%
FCHP	18,221	42	2.8%	12	0.8%	123	8.1%	133	8.8%
BMCHP	229,315	744	3.9%	269	1.4%	1,975	10.3%	2,219	11.6%

Ages 65+ *

Male

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NHP	133	0	0.0%	0	0.0%	2	18.0%	2	18.0%
NH	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
FCHP	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
BMCHP	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Female

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NHP	158	0	0.0%	0	0.0%	3	22.8%	3	22.8%
NH	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%
FCHP	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
BMCHP	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 2009 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.

Identification of Alcohol and Other Drug Services - Percentage of Members Using Services

TOTAL Male/Female: Ages 0—12

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	882,569	1	0.0%	5	0.0%	63	0.1%	69	0.1%
NHP	707,091	0	0.0%	1	0.0%	13	0.0%	14	0.0%
NH	570,463	2	0.0%	0	0.0%	40	0.1%	41	0.1%
FCHP	55,901	1	0.0%	0	0.0%	1	0.0%	2	0.0%
BMCHP	979,563	9	0.0%	0	0.0%	94	0.1%	102	0.1%

TOTAL Male/Female: Ages 13-17

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	375,353	55	0.2%	109	0.3%	693	2.2%	742	2.4%
NHP	224,213	21	0.1%	12	0.1%	104	0.6%	123	0.7%
NH	151,623	32	0.3%	7	0.1%	225	1.8%	242	1.9%
FCHP	18,784	1	0.1%	2	0.1%	28	1.8%	29	1.9%
BMCHP	280,702	71	0.3%	9	0.0%	429	1.8%	467	2.0%

TOTAL Male/Female: Ages 18-24

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	395,716	485	1.5%	1,672	5.1%	4,218	12.8%	4,698	14.2%
NHP	143,461	145	1.2%	66	0.6%	403	3.4%	462	3.9%
NH	108,135	190	2.1%	44	0.5%	535	5.9%	608	6.7%
FCHP	13,883	21	1.8%	1	0.1%	54	4.7%	63	5.4%
BMCHP	193,487	446	2.8%	143	0.9%	1,015	6.3%	1,200	7.4%

TOTAL Male/Female: Ages 25-34

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	468,328	910	2.3%	3,301	8.5%	8,306	21.3%	9,087	23.3%
NHP	170,340	279	2.0%	155	1.1%	912	6.4%	1,005	7.1%
NH	123,844	301	2.9%	93	0.9%	922	8.9%	1,008	9.8%
FCHP	20,069	26	1.6%	9	0.5%	128	7.7%	135	8.1%
BMCHP	226,598	671	3.6%	269	1.4%	1,864	9.9%	2,073	11.0%

Identification of Alcohol and Other Drug Services - Percentage of Members Using Services

TOTAL Male/Female: Ages 35-64

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	1,336,478	1,948	1.7%	5,780	5.2%	18,072	16.2%	19,569	17.6%
NHP	254,330	346	1.6%	185	0.9%	1,306	6.2%	1,459	6.9%
NH	189,482	600	3.8%	162	1.0%	1,613	10.2%	1,815	11.5%
FCHP	28,257	77	3.3%	22	0.9%	221	9.4%	245	10.4%
BMCHP	337,902	1,524	5.4%	459	1.6%	3,646	12.9%	4,132	14.7%

TOTAL Male/Female: Ages 65+ *

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NHP	291	0	0.0%	0	0.0%	5	20.6%	5	20.6%
NH	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%
FCHP	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
BMCHP	2	0	0.0%	0	0.0%	0	0.0%	0	0.0%

TOTAL Female: All Ages

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	1,793,289	1,317	0.9%	3,631	2.4%	11,982	8.0%	12,800	8.6%
NHP	891,158	490	0.7%	284	0.4%	1,756	2.4%	1,928	2.6%
NH	658,816	655	1.2%	201	0.4%	1,951	3.6%	2,151	3.9%
FCHP	80,342	75	1.1%	20	0.3%	250	3.7%	271	4.0%
BMCHP	1,180,088	1,571	1.6%	573	0.6%	4,192	4.3%	4,723	4.8%

TOTAL Male: All Ages

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
PCCP	1,665,155	2,082	1.5%	7,236	5.2%	19,370	14.0%	21,365	15.4%
NHP	608,568	301	0.6%	135	0.3%	987	1.9%	1,140	2.2%
NH	484,751	470	1.2%	105	0.3%	1,384	3.4%	1,563	3.9%
FCHP	56,552	51	1.1%	14	0.3%	182	3.9%	203	4.3%
BMCHP	838,166	1,150	1.6%	307	0.4%	2,856	4.1%	3,251	4.7%

* 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 2009 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.

Appendix H:
Identification of Alcohol and Other Drug Services: Rates for PCC Plan Coverage Breakouts

Identification of Alcohol and Other Drug Services - Percentage of Members Using Services

PCC Plan Members with Basic Coverage

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
Ages 18-64	65,710	325	5.9%	1,184	21.6%	3,202	58.5%	3,512	64.1%

PCC Plan Members with Essential Coverage

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
Ages 18-64	664,516	1,196	2.2%	5,764	10.4%	13,244	23.9%	14,868	26.8%

PCC Plan Members with Non-Basic/Non-Essential Coverage

	Member Months	Inpatient N	Inpatient %	Intermediate N	Intermediate %	Ambulatory N	Ambulatory %	Any Service N	Any Service %
Ages 0-17	1,257,915	56	0.1%	114	0.1%	756	0.7%	811	0.8%
Ages 18-64	1,470,296	1,914	1.6%	4,334	3.5%	16,262	13.3%	17,387	14.2%

REFERENCES

1. Chagpar AB, McMasters KM. 2007. Trends in Mammography and Clinical Breast Examination: A Population-Based Study. *J Surg Res*, 140: 214-219.
2. Ibid.
3. Ryerson AB et al. 2008. Recent Trends in U.S. Mammography Use from 2000-2006: A Population-Based Analysis. *Prev Med*, 47: 477-482.
4. National Cancer Institute website. http://www.nci.nih.gov/cancertopics/types/cervical/. Accessed 10/27/09.
5. American Cancer Society website. http://www.cancer.org/docroot/CRI/content/CRI_2_4_1X_What_are_the_key_statistics_for_cervical_cancer_8.asp?rnav=cri. Accessed 10/27/09.
6. American Cancer Society website. http://www.cancer.org/docroot/CRI/content/CRI_2_4_3X_Can_cervical_cancer_be_found_early_8.asp?rnav=cri. Accessed 10/27/09.
7. Sirovich BE, Woloshin S, Schwartz LM. 2005. Screening for Cervical Cancer: Will Women Accept Less? *Am J Med*, 118: 151-158.
8. MacDorman MF, Mathews TJ. 2008. Recent Trends in Infant Mortality in the United States. NCHS data brief, no 9. Hyattsville, MD: National Center for Health Statistics.
9. Kung HC, Hoyert DL, Xu JQ, Murphy SL. 2007. E-Stat Deaths: Preliminary Data for 2005 Health E-Stats. Hyattsville, MD: US Department of Health and Human Services, CDC.
10. WHO. 1998. *Postpartum Care of the Mother and Newborn: A Practical Guide.* Geneva: World Health Organization.
11. Green DC, Koplan JP, Cutler CM. 1999. Prenatal Care in the First Trimester: Misleading Findings from HEDIS. *Int J Qual Health Care,* 11: 465-473.
12. Ahluwalia B et al. 2009. Medicaid Coverage before Pregnancy: Pregnancy Risk Assessment and Monitoring System (PRAMS). *J Womens Health (Larchmt)*, 18: 431-4.
13. Braveman P, Marchi K, Egerter S, Pearl M, Neuhaus J. 2000. Barriers to Timely Prenatal Care Among Women with Insurance: The Importance of Prepregnancy Factors. *Obstet Gynecol*, 95: 874-80.
14. Benjamin MI, Capitman JA, Ruwe MB. 2009. Disparities in Initiation and Adherence to Prenatal Care: Impact of Insurance, Race-Ethnicity, and Nativity. *Matern Child Health J*, Epub ahead of print (6/26/09).
15. Braveman et al., 2000.
16. American Diabetes Association webpage, "All About Diabetes." http://www.diabetes.org/about-diabetes.jsp. Accessed 10/29/09.
17. Campbell RK. 2009. Type 2 Diabetes: Where We Are Today: An Overview of Disease Burden, Current Treatments, and Treatment Strategies. *J Am Pharm Assoc*, 49: S3-S9.
18. Heisler M, Bouknight RR, Hayward RA, Smith DM, Kerr EA. 2002. The Relative Importance of Physician Communication, Participatory Decision Making, and Patient Understanding in Diabetes Self-Management. *J Gen Intern Med*, 17: 243-252.
19. Ibid.
20. American Diabetes Association. 2009. Standards of Medical Care in Diabetes—2009. *Diabetes Care,* 32: S13-S61.
21. Campbell RK (op. cit.).
22. Ong KL, Cheung BM, Man YB, Lau CP, Lam KS. 2007. Prevalence, Awareness, Treatment, and Control of Hypertension Among United States Adults 1999-2004. *Hypertension*, 49: 69-75.
23. National Heart, Lung, and Blood Institute webpage, "What is High Blood Pressure"? http://www.nhlbi.nih.gov/health/dci/Diseases/Hbp/HBP_WhatIs.html. Accessed 10/28/09.
24. Hajjar I, Kotchen TA. 2003. Trends in Prevalence, Awareness, Treatment, and Control of Hypertension in the United States, 1998-2000. *JAMA*, 290: 199-206.
25. American Diabetes Association. 2009. Standards of Medical Care in Diabetes—2009. *Diabetes Care,* 32: S13-S61.
26. Bramley TJ, Gerbino PP, Nightengale BS, Frech-Tamas F. 2006. Relationship of Blood Pressure Control to Adherence with Antihypertensive Monotherapy in 13 Managed Care Organizations. *J Manag Care Pharm*, 12: 239-245.
27. Turpin R, Jungkind K, Salvucci L. 2003. The HEDIS Performance NAVIGATOR for Controlling High Blood Pressure: A Resource to Assist Health Plans Improve Patient Adherence. *Dis Manag*, 6: 43-51.
28. Centers for Disease Control webpage, "Attention-Deficity/Hyperactivity Disorder (ADHD)". http://www.cdc.gov/ncbddd/adhd/facts.html. Accessed 10/28/09.
29. Froehlich TE, Lanphear BP, Epstein JN, Barbaresi WJ, Katusic SK, Kahn RS. 2007. Prevalence, Recognition, and Treatment of Attention-Deficit/Hyperactivity Disorder in a National Sample of US Children. *Arch Pediatr Adolesc Med*, 161: 857-64.
30. American Academy of Pediatrics website. http://aappolicy.aappublications.org/cgi/reprint/pediatrics;105/5/1158.pdf and http://aappolicy.aappublications.org/cgi/reprint/pediatrics;108/4/1033.pdf. Accessed 12/7/09.
31. Rushton JL, Fant KE, Clark SJ. 2004. Use of practice guidelines in the primary care of children with attention-deficit/hyperactivity disorder. *Pediatrics*, 114: e23-e28.

REFERENCES

32. Gardner W, Kelleher KJ, Pajer K, Campo JV. 2004. Follow-Up Care of Children Identified with ADHD by Primary Care Clinicians: A Prospective Cohort Study. *J Pediatr*, 145: 767-71.
33. Monastra VJ. 2005. Overcoming the Barriers to Effective Treatment for Attention-Deficit/ Hyperactivity Disorder: A Neuro-Educational Approach. *Int J Psychophysiol*, 58: 71-80.
34. Substance Abuse and Mental Health Services Administration. Results from the 2008 National Survey on Drug Use and Health: National Findings. Available at http://www.oas.samhsa.govnsduh/2k8nsduh/2k8Results.pdf. Accessed 10/29/09.
35. NCQA. 2007. *The State of Health Care Quality—2007*. Available at http://web.ncqa.org/Portals/0/Publications/Resource%20Library/SOHC/SOHC_07.pdf. Accessed 10/29/09.
36. Magura S, Horgan CM, Mertens JR, Shepard DS. 2002. Effects of Managed Care on Alcohol and Other Drug (AOD) Treatment. *Alcohol Clin Exp Res,* 26: 416-422.
37. Broome KM, Flynn PM, Knight DK, Simpson DD. 2007. Program Structure, Staff Perceptions, and Client Engagement in Treatment. *J Subst Abuse Treat,* 33: 149-158.
38. Melnick G, Wexler HK, Chaple M, Banks S. 2006. The Contribution of Consensus Within Staff and Client Groups As Well As Concordance Between Staff and Clients to Treatment Engagement. *J Subst Abuse Treat,* 31: 277-285.
39. Substance Abuse and Mental Health Services Administration (op. cit.).